THE WORLD OF TO-DAY

Elliott & Fry

THEODORE BENT

Elliott & Fry

MRS. BISHOP

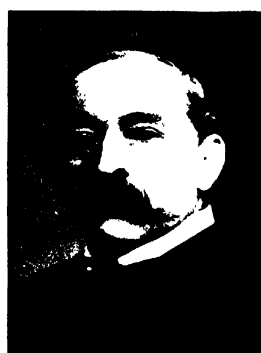
Elliott & Fry

SIR SAMUEL BAKER

Nadar, Paris

P. G. BONVALOT

Elliott & Fry

V. L. CAMERON

Elliott & Fry

A. R. COLQUHOUN

From a Photograph

HEINRICH BARTH

From a Painting

JAMES BRUCE

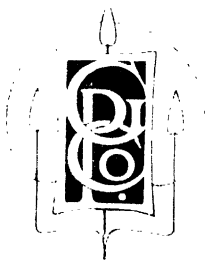
Nat. Portrait Gallery

SIR RICHARD BURTON

DISTINGUISHED TRAVELLERS AND EXPLORERS—I

THE WORLD OF TO-DAY

A SURVEY OF THE LANDS AND PEOPLES OF THE GLOBE AS SEEN IN TRAVEL AND COMMERCE

BY A. R. HOPE MONCRIEFF

VOLUME I

THE · GRESHAM · PUBLISHING · COMPANY
34 SOUTHAMPTON STREET STRAND LONDON

PREFACE

The main design in these volumes is to present a panorama of the World of our day. Upon what seems the fittest scheme of arrangement, its various lands and peoples are surveyed in turn, and their characteristics pictured on a scale not always, indeed, proportionate to their relative importance, since about China, for instance, an English reader naturally desires more information than as to the state of his own country. What the reader will want to know the writer has tried to supply, as far as his limits of time and space allow, by a readable account of geographical, political, ethnological, and social features, with glances at scenery and at natural history, without, however, going much into scientific questions that cannot be handled to advantage in such a work. History, also, must be but lightly touched on in pages dealing with the present time, yet sometimes sketches of past events seem not out of place, especially where they can be thrown into the form of foot-notes.

A large amount of statistical and commercial facts, partly set forth in tabular form and partly exhibited by means of diagrams or other devices that appeal to the eye, is placed apart at the end of the volumes for the benefit of readers who seek such solid information. For this matter the publishers are responsible. A full index is given with the last volume.

The author has done his best to go to the latest and most trustworthy sources of information; but a work of this extent naturally takes some time to prepare, and the considerate reader and critic will hardly expect to find here all the most recent information to be obtained from yesterday's newspapers. Though the author has travelled in four of the continents described, he does not pretend to be often drawing from first-hand knowledge. He must express his

obligations to friends all over the world who have helped him by their communications; but his main indebtedness, of course, is to countless books of travel, in several languages, from which he has ventured occasionally to quote lively passages of personal description and experience that, placed as foot-notes, go to illustrate the text, as do the maps and cuts plentifully supplied by the publishers.

December, 1904.

Postscript, 1912.—The author and publishers have taken full advantage of every opportunity of keeping the information thoroughly up-to-date, and owing to the rapid sale of the work such opportunities have been numerous. In this reprint the work of revision to bring it abreast of recent events and changes has been carried still further.

CONTENTS

VOLUME I

LIST OF ILLUSTRATIONS

VOLUME I

COLOURED PLATES

MAPS

TEXT ILLUSTRATIONS

THE WORLD OF TO-DAY

INTRODUCTION

It is well known that our world forms an almost globular body, some 24,000 miles round, in superficial area about 197,000,000 square miles, of which nearly three-fourths are covered by water with a mean depth, roughly, of 2000 fathoms in the larger seas. It is estimated that the remaining land area supports at present a population of 1,500,000,000 or 1,600,000,000 human beings. The age of this planet, and of its inhabitants, make much more obscure questions. Science has now only a smile for Archbishop Ussher's Chronology, that limited the antiquity of our earth to six thousand years. Imagination itself staggers in looking back to the time when the globe's igneous mass had cooled to its present temperature. Since then countless ages have gone to shaping and colouring its "fire-fused and water-laid crust", ploughed up by ice, convulsed by earthquakes, hidden or disclosed by subsidence and upheaval about the great ocean cavities, wrinkled and folded by gigantic pressure, seamed and spread by water-courses, carved and fretted by continual action of the elements into its various familiar contours. Still more vain, in the present state of knowledge, is any exact calculation as to the first stirrings of life at a time for which we must count back by thousands, perhaps by millions of centuries.

The first traces of man—which, so far as his appearance in Europe goes, may date from before the Great Glacial Period, when the whole of the northern hemisphere was swathed in ice show him so little raised above the higher mammals that enormous measures of time must be allowed for his development even into the savage state represented by tribes still extant in Africa and Australia. Those who still labour to believe that our race, with its manifold features, tints, and tongues, has developed in any historic period from a single pair, should consider how long such a tribe would take in coming by the first rudiments of art that distinguish us from the beasts, in learning to shape the rudely-fashioned stone weapons and implements that turn up in beds where they have lain buried for ages, in acquiring the use of fire, of clothes, in developing the first principles of morality, the first glimmerings of knowledge, in forming societies among which the primitive instinct of self-preservation might grow to widened sympathies and enlarged relations of mutual service. The earliest remains of states and cities, on the alluvial plains of the Nile and the Euphrates, certainly date back as far as what used to pass for the whole life of mankind; and they present buildings, institutions, arts, and elements of science which require a long previous schooling in culture, evolved under favourable conditions that had raised these communities above the then general

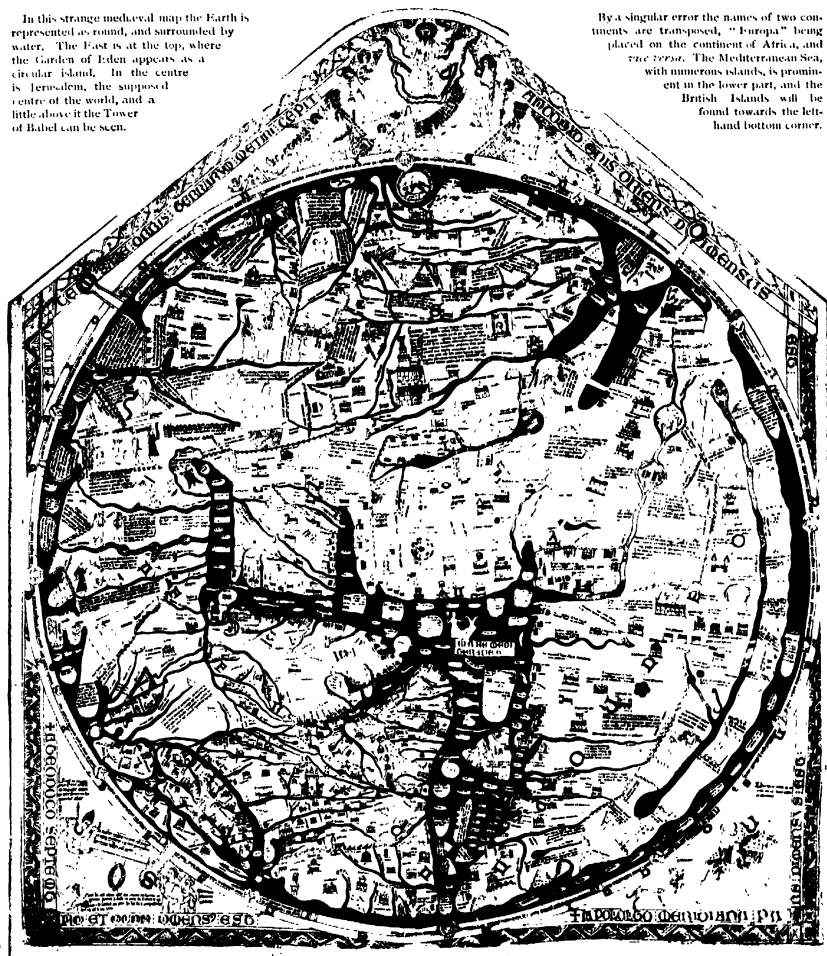
level of humanity. When the lofty Chaldean temples aspired to read heaven's secrets, less fortunate races were yet wandering in woods and sheltering in caves, often as little removed from a bestial state as the stunted ape-like inhabitants still found in dark corners of the earth, objects of pitiful amazement to savants and explorers, who here cannot but recognize the essential features of their own kind. Between these pigmies and the giants of cultured intellect what an immeasurable term must intervene, contracted as it is before our eyes to a few years by the rapid evolution from crawling infancy to reasonable humanity! Many and long were the stages of advance from naked troglodyte to well-equipped hunter, from hunter to herdsman, from herdsman to farmer, and from farmer to citizen; and comparison with peoples still in backward stages of progress shows how, through far the greater part of this dim history, man was in no position to estimate his real place in nature or even discerningly to survey the earth on which he lived.

It would seem that his first questionings were more keenly turned upon the sky than on the ground. While, fooled by his own senses, he has been ever prone to rash guesses at the cause of all phenomena, the impressive procession of the heavenly bodies drew attention from enquiring minds before they found cause for studious wonder in their humbler environment. Limited in his range by fear and need, the savage could not but be long in gaining ground for any wide outlook on the earth's varied surface, where always he inclines to take his familiar seat as centre of the universe. The first conception of geography is perhaps expressed by the recurrence of names meaning *the* nation, *the* river, *the* mountain, all others being regarded as unworthy of distinction. We have not far to look, even in modern life, to see how shy of each other peoples are, how ignorant of the "outlandish", how dearly bound by prejudices to the one corner in which they feel at home. The first impulse to travel would come from want, to which soon became added the lust of war and conquest, when to be neighbours was to be enemies, as is still the case over a great part of the world. "The good old rule, the simple plan" of robbery would suggest itself before barter. Trade sprang up as slowly as did intelligent curiosity about foreign countries. Cased in oak and triple brass, indeed, must have been the first hearts that dared the perils of the ocean. The first distant voyages may well have been accidental, through some adventurous fisherman being blown away from his native shore. Yet the high antiquity of commerce is shown by the early use of bronze tools in a region destitute of tin; and the wide-spread adoption of the precious metals as currency seems to imply some kind of international intercourse at a very remote period.

The Phœnicians appear as the earliest historic navigators, whose settlements can be traced far to the east and west of their native coast, unless, as has been maintained, they started from the Persian Gulf rather than the Levant. The conformation of the Mediterranean helped to encourage commerce and mutual knowledge among the civilizations grouped around it. Greek philosophers attained to true conceptions of the shape and measurement of the earth, but the "world" of classical geographers was practically confined to a longitudinal strip across the northern hemisphere, ending with the Atlantic at one end and at the other with a shadowy India, Europe being enlarged out of its due proportion, all bounded to the south by the Sahara, and to the north by cold dim haunts of wild Scythians, whom imagination magnified into Titanic

Gogs and Magogs. The Ptolemaic system, that took this more or less visited region as centre of our universe, long weighed upon speculation; and for centuries superstition helped to darken knowledge, when pilgrims of more than one faith were the most active geographers, when devout travellers duly ex-

In this strange medieval map the Earth is represented as round, and surrounded by water. The East is at the top, where the Garden of Eden appears as a circular island. In the centre is Jerusalem, the supposed centre of the world, and a little above it the Tower of Babel can be seen.

By a singular error the names of two continents are transposed, "Europa" being placed on the continent of Africa, and *vice versa*. The Mediterranean Sea, with numerous islands, is prominent in the lower part, and the British Islands will be found towards the left-hand bottom corner.

Map of the World, drawn by Richard de Haldingham, about A.D. 1300, and now preserved in Hereford Cathedral. (Original is on vellum 54 ins. × 63 ins.)

pected to see "the ark a-top of Ararat", and when the strangest forms were attributed to the world, while fathers of the Church banned the impious idea of antipodes. The childish notions of the dark ages are illustrated by such a map as that preserved in Hereford Cathedral, its vague topographic details overlaid by pictures of the Crucifixion, the Tower of Babel, the Pyramids, the

Labyrinth of Crete, and other subjects from sacred and profane history. Gerard Mercator, in the sixteenth century, was one of the first scientific map-makers, by which time the Copernican theory, making its way against theological opposition, had begun to revolutionize man's notions of his place in the universe, while the introduction of the compass gave a wider range to maritime enterprise.

The property of magnetized iron appears to have been recognized in China sooner than in Europe; but we know little of early navigation in the Far East. Arab merchants made adventurous voyages, of which we have some exaggerated memory in the story of Sindbad. The boldest mariners, on our side of the world, were long the Norsemen, with plunder rather than commerce for their beacon. There is now little doubt that Viking wanderers found their way across the Atlantic long before Columbus, seeking an ocean route to India, hit upon that new world, to die without rightly knowing what he had "discovered". There is reason to suppose that the Chinese also had already visited the western coast of America, which, across the narrow Behring's Strait, must have had old intercourse with the northern wilds of Asia. Meanwhile, Italian traders had distinguished themselves in striking out overland trade routes towards the east; the ports of Italian republics were the chief markets of the world; and the Venetian Marco Polo, though he belongs to the thirteenth century, may be called the first of great modern travellers.

It was the Latin peoples who showed the way in the rapid expansion of maritime enterprise that came with the dawn of science, when ships no longer crept cautiously along familiar shores, but, trusting to the compass, spread their sails to all winds for bolder and bolder flights upon untried oceans. Columbus was a Genoese in the service of Castile. Amerigo Vespucci, who so unfairly stood godfather to the new continent, was born at Florence. Before them Prince Henry the Navigator had sent out Portuguese sailors for the exploration of the African coast. To Portugal belonged Bartholomew Diaz, who first reached the Cape of Good Hope; Vasco da Gama, who sailed round it to India; and Magellan, who traced the way into the Pacific, and is the earliest circumnavigator on record. The elder Cabot, though he sailed under the English flag, was an Italian by birth. Spaniards were the conquering pioneers of America. In the romances of the Peninsula, ships and sea-fights came to figure largely among the giants, dragons, and enchantments that had filled older fiction. It was Hispania that then aspired to rule the waves; and for a time it would be the empire of Spain over which men might say that the sun never set.

The discoveries of those worthies came mostly close together about the end of the fifteenth century. In the next period, the sons of the Norsemen began to take that lead which they have never again lost. Drake, Hawkins, Cavendish, Frobisher, Davis, Hudson, Baffin, founded a school of English seamanship that, while rivalling the Spaniards in southern seas, took for its special aim the search for an icy north-west passage round the new continent—a bootless quest not achieved till the middle of last century. Sir Humphrey Gilbert, Sir Walter Raleigh, and Sir Richard Grenville founded our "plantations" in North America, where French Huguenots had already anticipated the Pilgrim Fathers in seeking an asylum for their faith. The devotion of Catholic missionaries was active in penetrating the interior of newly-discovered

countries, through which coarser spirits were lured by will-o'-the-wisp hopes to find golden El Dorados and fabulous Enchanted Gardens or Fountains of Youth.

The publication of Hakluyt's Voyages, at the end of Elizabeth's reign, is a monument of the vast progress made in geographical knowledge within a single century. French adventurers continued the exploration of Canada, begun by Jacques Cartier, following up its lakes and streams into the heart of the Continent, at the southern end of which Dutch sailors rounded and named Cape Horn. Asia as well as America was being eagerly pried into both by land and sea, with jealous heart-burnings among European competitors for the riches of both East and West. The Dutch, who had signalized their independence by brave attempts in the Arctic regions, managed to secure for themselves a firm footing in the Far East, whence, in the middle of the seventeenth century, their pioneers, Tasman and others, reached a new division of the world, which after all fell to the lion's share of the nation that sent out Dampier to the same discoveries. The islands of Australasia and Polynesia were gradually added to our maps by voyages, among which Captain Cook's stand pre-eminent for the discoveries made before his tragic end. He was followed by the French expedition of La Perouse, who also perished, and more obscurely, neither of his vessels coming back to report a calamity ascertained many years later.

Delisle and D'Anville won for France, in the eighteenth century, the high place in map-making that formerly belonged to Holland. In England, the publication of popular collections of voyages such as Astley's, Harris's, Hawkesworth's, and Cook's showed a wide-spread interest in the subject, supplying youth with enthralling tales which in this generation, it is to be feared, have to be more highly spiced to a jaded taste. Associations were formed for geographical research, and the government of different countries vied with each other in well-equipped expeditions of discovery. The first voyagers to unknown regions had often been mere traders or freebooters. Among the best-qualified early explorers were Catholic missionaries, such as the Jesuits who, in the beginning of the century, had contrived to make a notable survey of China. Now bold seamen were often accompanied by naturalists, as Cook by Joseph Banks, afterwards President of the Royal Society. Distinguished men of science came forward to spend laborious years in distant lands, such as the Frenchman La Condamine, the Danish officer Niebuhr, and the German Humboldt. Private adventurers, like James Bruce, by land and sea ran many risks, including that of being taken for liars at home, as has been the frequent fate of those with travellers' tales to tell. In 1784, with the first observations of the Ordnance Survey, taken on Hounslow Heath, England began her scientific study of geography at the right end.

A serious check was given to maritime discovery by the wars that for nearly a quarter of a century found other work for the fleets of Europe. After the peace, a store of energy became set free for useful enterprises, and the power that now ruled the waves was foremost in surveying them. During the domination of France by land, Britain had made a not very hopeful beginning of her Australian colonies, while wresting from other powers colonies and islands that gave her new interests in different parts of the globe.

A notable date was the foundation in 1830 of our Royal Geographical Society, which gradually took upon itself the initiative often assumed by private associations that, in the cause of science or of commerce, had done useful work

Dr. Fridtjof Nansen

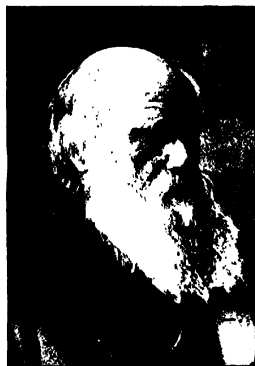
(From a photograph by Van der Weyde)

by commissioning volunteer explorers. In the latter part of the century a new patronage for discovery was afforded by great newspapers finding their account in similar enterprises. It ought to be said that, while our Royal Society had long taken an interest in geography, both France and Germany were first in the field with societies specially devoted to this study, an example that has since been followed by most civilized countries.

In this new period of adventure the mysterious Arctic regions seemed to offer the most tempting challenge. Half a century before, an expedition sent out by the Royal Society had reached beyond 80° north latitude. Now a succession of hardy Britons resumed the struggle towards the Pole—Barrow, Scoresby, Ross, Parry, Franklin, Rae, and others. Russia had already done much to explore her frozen seas; and Wrangel and Krusestern now made their names known in the scientific world; but the Swede Nordenskjold was the first to accomplish the north-east passage to the Pacific, in 1818, as in 1850 M'Clure hit on the long-sought north-western channel. Other nations joined in the quest, to which a second aim had been given by the penetrating of the Antarctic Circle before the middle of the century. Americans were all along distinguished among the knights aspiring to pierce those icy shields. Dr. Nansen's was one of the famous failures against the North Pole. At last (April 6, 1909,) Commander Peary seems to have first authentically attained the long-sought honour, the news coming with dramatic effect after another Transatlantic explorer had put forward a claim which he was unable to substantiate. Through the forbidding Antarctic ice-barrier, also, Scott, Shackleton, and others have struggled to within a degree or two of that Pole, reached (1912) by the Norwegian Amundsen.

Sir H. M. Stanley

(From a photograph by Elliott and Fry)

On land, the most fruitful accomplishment of last century was the penetrating of the African continent, to which so many dauntless travellers have given their lives. The progress made here is evident on comparison of any recent map with those of two generations ago. Fanciful lines like the Mountains of the Moon have been wiped off the interior that once showed such extensive blanks; the long mysterious sources of the Nile have been traced; great lakes have been discovered, huge forests traversed, extensive mountain regions found to be available for European settlement; and most of this continent is now

Charles Darwin

(From a photograph by Elliott and Fry)

divided into "spheres of influence" within which the different powers concerned are filling up the outlines of early exploration. At the same time, the wilds of Australia and of New Zealand have been searched out, and annexed to civilization. The ocean of islands beyond has been at least mapped, and many of them are now well known. Our acquaintance with Asia has been made more precise; and in its most advanced region, Japan, native science is coming into touch with that of Europe.

A mere list of the travellers who in our time have notably added to geographical knowledge would be too long for this brief summary. The tendency among them, as in all branches of science, has been to specialization: the American Maury started a school of ocean geography; Wallace, Darwin, and

In the Antarctic Regions: the Leader of a recent Expedition (M. Borchgrevink) taking Observations

Bates were naturalists in the first place; other names are renowned in ethnography; firm-footed adventurers, such as Whymper and Conway, have made a study of mountains; some explorers, like Stanley, have united a turn for adventure with a keen eye for the benefits of commerce and colonization; and Livingstone is a type of those whose desire to extend the boundaries of knowledge was inflamed by zeal to let in light upon dark places so full of cruelty and superstition. Thanks to many men, of various aims and tempers, the twentieth century now possesses a wide acquaintance with the earth on which it dawns in hope of ever-growing mastery over nature. Some gaps have still to be filled; some great spaces, such as New Guinea, remain provokingly bare on our maps, though known to be full of well-marked features; as yet we have to guess what the ice-packs, north and south, may hide from our view; but on most parts of the globe only gleanings await the investigator of the main facts as to its conformation, size, and capabilities; and from countless books one may hope to form a fairly complete notion of the world as it is, with its manifold peoples and productions.

Entrance to the Mitan Gorge, Yangtse River (see page 45). From a photograph by Mr J. Thomson, F.R.G.S.

THE CHINESE EMPIRE

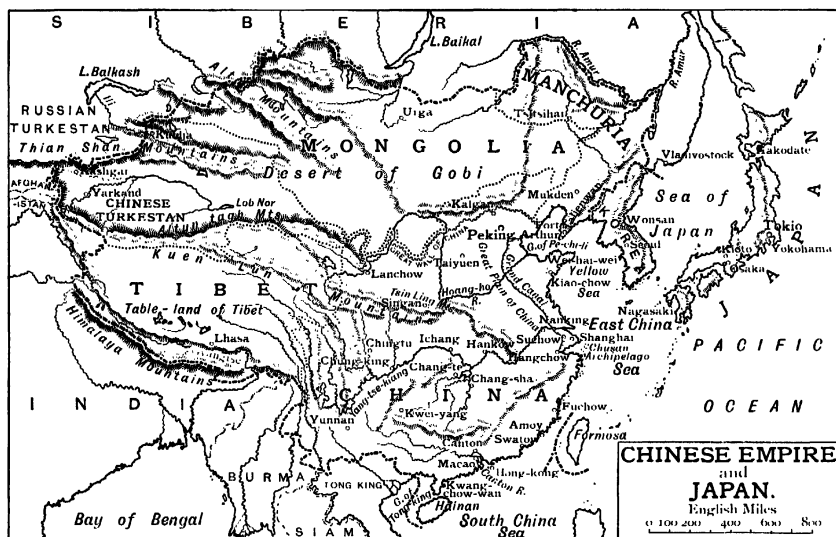
CHINA: PAST AND PRESENT

"From China to Peru" was Johnson's outlook on the world; and our survey of it may well begin with a country nourishing its largest and oldest nation, one that boasts a history of five thousand years, and that undoubtedly cultivated science, arts, and literature when our ancestors were bloodthirsty barbarians. China of late has been much in the eye of Europe, which, having scarcely got over a scare that the crowded millions of the East, once instructed and armed for conquest, might overrun the West as their Tartar ancestors did in former days, finds itself threatened with a more pressing danger in the jealous rivalries of its own naval and military powers, each concerned to secure a share of spoil promised by what seemed the imminent break-up of an empire as unwieldy and corrupt as it is vast and populous. For every reason, then, we turn first to a region still imperfectly known in Europe, but daily becoming more familiar through relations both of war and peace. We have now innumerable publications of travellers and scholars, some of whom equal the Chinese themselves in acquaintance with what is best worth knowing of its past, and others are well qualified to speak on its present state. As to its future, that is a question of unusual difficulty, while of the highest importance to the world.

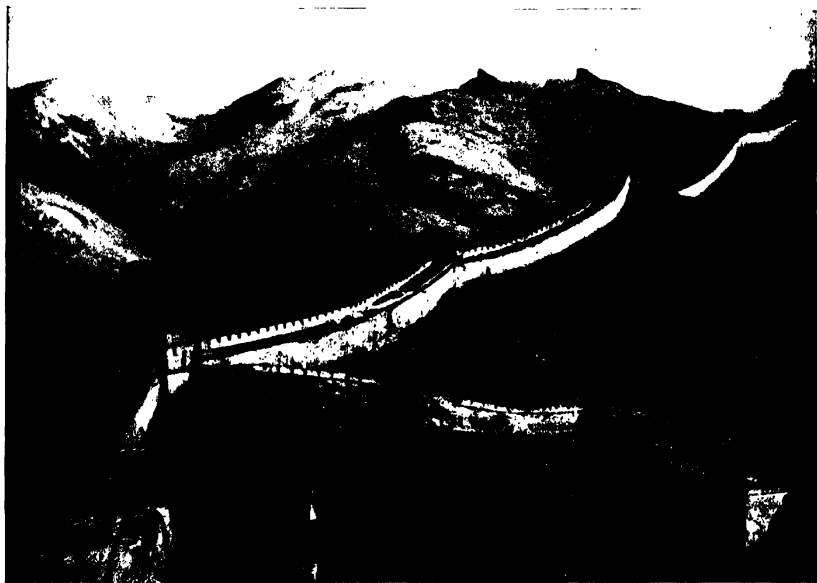
The Chinese dominion, that once covered half of Asia, still extends over some four and a half millions of square miles, an area larger than Europe, and is believed to contain more than four hundred million souls, nearly a quarter of the human race. Two-thirds of this area belong to the border dependencies of Manchuria and Mongolia, Turkestan and Tibet, comparatively ill-populated and unproductive parts of the empire, useful to it chiefly as insulators, and now on one side shrinking under foreign aggression. These, with a total population roughly counted at twenty-five millions, may be set aside for consideration apart. In China proper, known to our old writers as "Cathay", and to its own people as the "Middle Kingdom"—the Chinese phrase for "Hub of the Universe"—is concentrated the bulk of the industrious civilization which has existed here for at least forty centuries. Its population was calculated half a century ago at over 400,000,000; though since then this has in some parts diminished through internal commotions and foreign emigration, natural increase should have now brought it up to about the same figure, if we can depend on Chinese statistics; while the estimates of foreigners vary down to less than 200,000,000[1]. A

[1] It is, of course, difficult to verify such figures. On the one hand, national pride is inclined to exaggerate; on the other, where population makes a basis of fiscal burdens, the people have an interest in understating their numbers.

few millions of Chinamen are known to be thriving in other countries, which have more or less grudgingly received them; but in many cases the object of such emigrants is to return, alive or dead, to their native land.

The Middle Kingdom is bounded on the north by the Mongolian deserts and steppes, on the east by the plateaux of Central Asia, that as high mountain ranges project laterally into the country to enclose the basins of its two great water-ways, the Yang-tse-kiang or Blue River, and the Hoang-ho or Yellow River. *Ho* is the name denoting a river in the north, as *kiang* in the south. North and south of these are two less-important streams, the Peiho, flowing through the Peking

province into the Gulf of Pechili, and the Si-kiang, draining the mountain barrier of Indo-China into the estuary on which stands Canton. Maps on our atlas scale give no adequate idea of the mountainous features of much of the country, cut through by countless tributaries of its great streams, and by smaller ones that have a direct course to the sea. The southern half of the empire is the more irregularly broken by loftier elevations. The flattest part is naturally the wide alluvial plain on the east side, formed by the silting up of those rivers, which go on pushing out the land so fast that calculations can be made in how many centuries China may become coterminous with Corea and Japan. The Yellow Sea, which now separates them, is so called as visibly discoloured by the turbid burden washed down from the inland ranges. Off the central shore is the East Sea, enclosed by the Loo Choo Islands. South of the large island of Formosa, now Japanese territory, the waters are known as the China Sea, where another large island, Hainan, marks off the Gulf of Tonkin. Most of the coast-line, over 2000 miles in length, is fringed with small islands and indented with natural harbours, but the only deep gulfs, besides river estuaries, are at the extreme north and south ends.

Extending as it does over twenty degrees of latitude, China has a

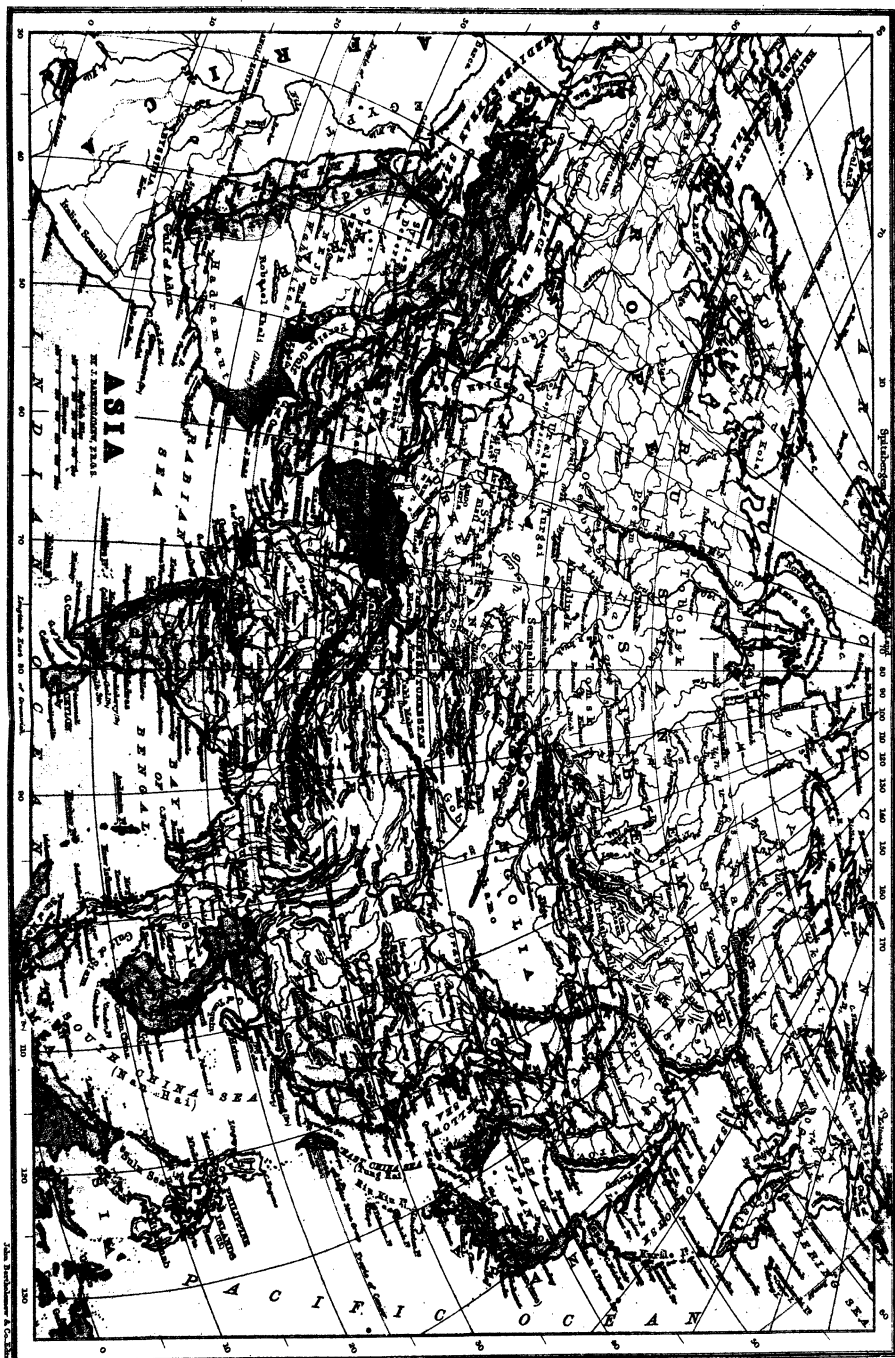
climate which in general tends to greater extremes than in parallel parts of the Atlantic sea-board, while its seasons are more regularly divided by the south-west and north-east monsoons. The south is sub-tropical, and has the largest share of rain, the mean fall on the coast being some 40 inches, nearly twice as much as the driest part of the British Isles. The north, cooled by winds from Siberia, has a severer winter than the corresponding latitudes of Europe. In the northern province, at the same distance from the Equator as Gibraltar, the rivers are frozen for months. At the central point of Shanghai the maximum temperature reaches 100° F., while the minimum falls to 20°

Part of the Great Wall of China (see page 39). From a photograph

below freezing-point. The Chinese would need to be, as they are, patient both of cold and heat. In the mountainous districts the climate is, of course, conditioned by elevation and exposure. The coast is more equable through moist winds blowing from the Pacific Ocean. The seas are exposed to devastating typhoons, whose course can be predicted to a certain extent. Through droughts or floods, the land often suffers from wide-spread famines, such as that which this year has been decimating millions of industrious peasants.

Before going on to examine in detail the features of this enormous empire, the reader should have an outline of the history and political institutions that have moulded its national life. Thanks to the early introduction of writing, and the Chinese respect for literature, there is no nation whose annals go farther back, yet not so far, nor so authoritatively, as to throw clear light on how and whence such a people came to settle in so large a country.

The origin of the Chinese, indeed, is buried in distant obscurity. Their astronomical conceptions have suggested them as akin to the Accadian race,

seen dimly through the mists of earliest history; and some authorities hold it probable that the conquerors of China came from that Mesopotamian land that may have been the first cradle of civilization. In any case they seem to have reversed the adage, "Westward the star of empire takes its way", flowing into fertile China from the eastern steppes, submerging the aboriginal natives, and perhaps fusing with other ancient stocks that, through common conditions of life, became developed into a marked human family. The Chinaman may be defined as a more gentle and polished Tartar, and certainly has not far to look for his collateral kinsmen. Considerable differences of type are still apparent in various parts of the empire, on whose borders new blood is always being taken in, while, as usual, in the remote highland districts survive tribes that have kept themselves in savage aloofness from the body of civilized population. Authentic history accounts for a large strain of Tartar blood. The Chow dynasty is known to have existed in the days of classic Greece; then came a period of confusion, ended by the Tsin line, whose name is understood to be the origin of the word China. Under Che-Hoang-ti, the hero of this dynasty, who first took the title now translated as emperor, the Great Wall was begun, 214 B.C. Again the empire broke up and was harassed by the rude warriors of the steppes. In our thirteenth century it was conquered by Mongols, who were not insensible to the advantages of civilization, for their famous prince Kublai Khan constructed the Great Canal, that might well have been called a wonder of the world. Under him China came into the ken of Europe through the travels of Marco Polo. Before long this power was replaced by the native Ming dynasty, which in turn became ousted by the Manchu race that held sway since our Stuart times. Occupying much the same position as the Normans in Saxon England, these foreign emperors long secured the reverent loyalty of the people, yet not so completely as to forgo a bodyguard of Tartar warriors, who also garrisoned the citadels of China.

The Chinese are a submissive people, and their conception of the state as a huge family disposed them to bow before a ruler who was the head of their religion as well as of their political organization. Their emperor, "Son of Heaven", looked on as a living idol, was supposed to direct all affairs of state from his imposing seclusion, out of which he never emerged unless swaddled in ceremony. Yet it is hard to say how far such a despot was independent of the tyrannous custom that made the force of his authority; a succession of young and incompetent emperors of late must have affected the constitution. That a weak prince might be set aside, appears from the manner in which the reins of power were recently snatched from the hands of the sovereign by a palace clique. In any case, he ruled with the advice and assistance of a council, and of several Boards of Public Service, War, Rites, &c., answering to our ministries, each of six members who were Chinese and Tartar in equal numbers. A peculiar institution was the Board of Censure, which in theory ought to be the flywheel of the machine of government. This body, whose name may be literally translated "The Court that watches over all", had fifty-six members, half of them Tartars, who should act as tribunes of the people, even to the extent of criticizing the emperor's own acts, while they themselves might be called to account for neglect of duty. One of them was appointed to be constantly in attendance on the sovereign; others seem to have had the function of travelling about in disguise to observe the conduct of his satraps. General

Tscheng-ki-Tong assures us that nothing could warp these magistrates from rectitude, and that history offered numerous examples of their outspoken fidelity in the face of death. But when we consider the general corruption of Chinese officialdom, and the fact that these surveillants were paid directly by the emperor, we must fear that their check upon his power came to be not very efficient in our age, whatever it may have been in purer times; and as to lower officials, it is generally believed among Europeans that the espionage of the censors was chiefly directed to taxing the spoil of misgovernment. This is not the only point in which Chinese theory and practice prove widely different. It seems most probable that the cumbrous machine of government worked mainly by its own momentum, but that, within certain limits, it might be directed by any strong hand on or near the throne.

The viceroys who governed the provinces, two or three of them sometimes grouped together for joint administration, possessed a great measure of independence, so long as they could retain the favour of the emperor or of the ruling junto. Distance alone from the remote capital would hinder interference with them; but it appears that European innovations, such as the telegraph and the supply of an imperial revenue through the Maritime Customs, went towards strengthening the power of the central government. Something like home rule has prevailed in each province, where the taxes were mainly expended for local purposes or wasted in official corruption, the authorities being much left to themselves on condition of letting a certain proportion of their receipts filter to Peking. A large part of the provincial tribute consisted of corn sent to the capital. The people on the whole were not heavily taxed; but the mandarins were accused of injustice in particular cases, a special grievance being the inland *likin* barriers set up for the collection of customs at so many points that trade could be made to pay repeated toll, with continual wrangling against arbitrary exactions. Our Government recently agreed with the Chinese for the abolition of the *likin* customs in consideration of an increased import duty; but it seems questionable if the emperor had power thoroughly to carry out such an abolition. Only part of the proceeds of taxation proved available for the imperial power, which thus had scanty means of bringing itself to bear either for oppression or for the general good.

The best working institution in China, forced upon the country through the interest Britain acquired in its revenue, pledged to us as indemnity, was the Imperial Maritime Customs, that under the late Sir Robert Hart has, for over fifty years, collected the duties at the open ports, incidentally performing other services, such as lighting the coast and putting down smugglers. This service was officered by Europeans, and bound to Western principles, and the results have been such as to convince the Chinese that honesty is the best policy in one branch of public affairs, while the steady revenue thus collected offered a security to European creditors for a national debt. The country has hitherto profited less by the services of European officers engaged to reorganize its military and naval forces, since in these matters Chinese pride would not submit to be schooled by men whom it scornfully tried to regard as barbarians, and at whose hands it was loath to accept even the lessons enforced by adversity. Its military power was quite out of proportion to the extent and weight of its rule, depending upon force of custom rather than of arms. A local militia, as ill-armed as ill-trained, could be raised by the viceroys for any temporary emergency. What

may be called the nucleus of a standing army was chiefly the Tartar troops, some tens of thousands strong, that, scattered over the empire, guarded the interests of the dynasty; in recent times there has been also kept in pay a considerable body of Chinese soldiers. Even these regular soldiers were imperfectly equipped, matchlock firearms and bows making part of their armament, and some regiments depending on a motley uniform in imitation of a tiger's skin, to strike terror into their enemy. The Chinese are said to have discovered gunpowder independently; but while Europe has been perfecting the means of destruction to a point that seems likely to make war impossible, one of their most effective contributions to artillery is represented by stink-pots, hand-grenades charged

Photo W. H. Ra.

Custom-house, Tientsin

with suffocating combustibles, not very deadly to fighters whose shells and bullets kill thousands of yards away. Their generals, as a rule, were quite incompetent, excelling in no martial quality but haughtiness. Yet, when well led, the Chinaman has shown himself an excellent soldier; and such food for powder is so abundant that China should become a formidable military power now that she begins to recognize the conditions of modern warfare.

In its dealings with the outside world, China had for some time back attempted to carry out an obstinate policy of exclusion. It was not always so: Marco Polo was kindly received; the early Portuguese and other traders were encouraged; Catholic missionaries were at first welcomed. For a change of attitude towards the "foreign devils" must be blamed the insolent manners of strangers, as convinced of their own superiority as the Chinese themselves, but not so bland in their self-complacency. Our British zeal to force the benefits of commerce and Christianity on the Far East proved ill-pleasing to the Chinese, who had a real grievence in the opium habit introduced among them more than a century ago for the profit of India. The opium war of 1840 was not such a black business as it is sometimes painted; but in truth the *casus belli* might have been a more honourable one to us. All along, misunderstandings and

Chinese Soldier
(From a photograph by Mrs. Bishop)

quarrels came to be exasperated by the difficulty of access to the centre of power in China. Two embassies in the reign of George III had been received at the court of Peking in an unsatisfactory manner, and to the Chinese their errand was represented as the tribute-bearing which seemed the only fit intercourse between the Son of Heaven and those outer barbarians. It came as a sore blow to Chinese arrogance when the barbarians easily proved their masters in battle. Hong-kong was ceded to us, and five other ports were opened to British commerce. In 1856 China had so far recovered her defiant mood that a fresh war was provoked, this time against Britain and France as allies, and after four years, with a term of intermission, it ended by the taking of Peking. Another quarrel with France followed in 1883, when again China found her obsolete armament at a disadvantage. One concession after another was wrung from the reluctant power that vainly strove to be left in proud isolation from the intruding world. The opening of fresh treaty ports, now some dozens in number; the establishment of embassies at Peking; the sending of envoys to Europe; the right, long contested, of audience with the throne, were successively conceded; and Chinese arrogance retired into the background before Chinese astuteness, aiming to hamper by policy what could not be repelled by force.

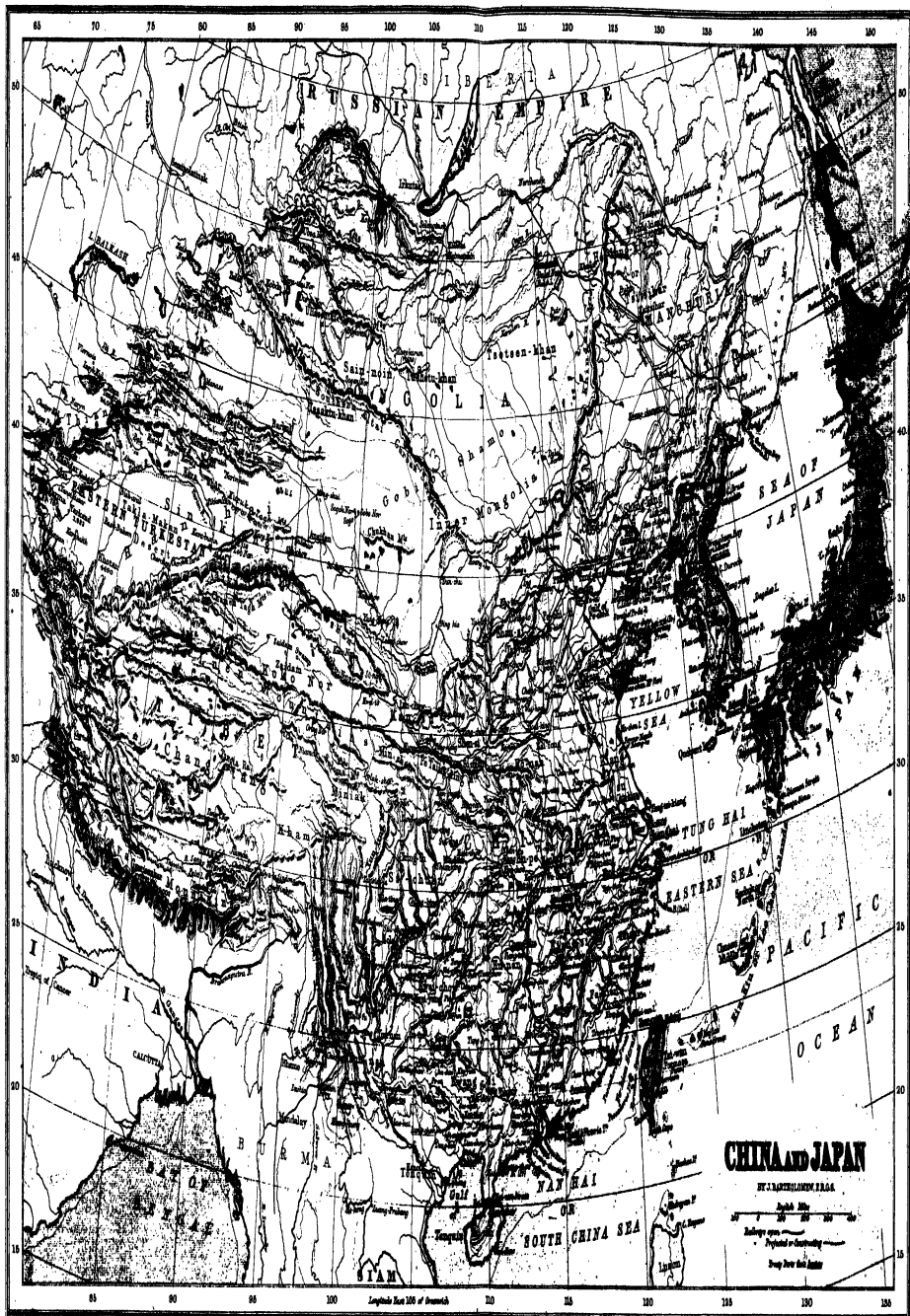
In the meantime the empire had been shaken by violent internal commotions raging side by side with foreign war. In 1850 began the Taiping insurrection against the Manchurian dynasty, that kept a great part of the country in turmoil for nearly fifteen years, and was not put down till 1865, when to restore order the services of General Gordon and other officers had been lent by the British Government, on the policy of bolstering up the imperial government as the lesser of two evils. Mohammedan rebellions in Yunnan and in Turkestan had also to be lingeringly suppressed; and the slow mind of the Chinese Government awoke to the fact that it had much to learn from the foreigner in the arts of war.

Its efforts at modern armament were put to a rude test in 1894, when China engaged in a struggle with Japan, a nation that had more clearly and intelligently recognized the superiority of Europe, not allowing blind conceit to stifle improvement. Both by land and sea the Chinese were rapidly and disgracefully defeated. The soreness of this humiliation revived the national ill-will to foreigners, who had now lodged themselves firmly in the country once so jealous of intrusion. The Germans appeared upon the coast; the Russians began to

Chinese Soldier
(From a photograph by Mrs. Bishop)

unmask deep-laid schemes for aggrandizement at the expense of China. When Germany took excuse to seize Kiaochow, Russia occupied Port Arthur, and Britain set hands on the harbour of Wei-hai-wei, while the French helped themselves to a port on the promontory opposite Hainan, and went on pushing their pretensions from the former dependencies of China, annexed by them on its southern side. Cause for quarrel was often afforded in insults to foreigners among the ignorant populace, sometimes by the murder of travellers, more often of missionaries whose own indiscretion was apt to be irritating to popular superstition. It is fresh in our minds how tumults in the provinces about the capital, chiefly stirred up by a secret patriotic society called the "Boxers", also, it is said, by fanatical Buddhist monks, brought about cruel massacres of missionary families and native converts, the authorities being in many cases unwilling, or perhaps unable, to interfere, though in the central and southern provinces the viceroys had power to hold disorder in check. How far the central government designed to use this popular movement against the foreigners seems still uncertain. By a palace revolution, certain violent spirits in the ruling family usurped the power of the young Emperor, who had shown liberal tendencies; and it is understood that he was for a time a prisoner in the hands of his aunt, the Empress Dowager, who in turn seems to have been led by the influential Li Hung Chang, by the fierce Prince Tuan, and by menial favourites. Several native reformers were executed or exiled. Anti-foreign feeling certainly got the upper hand at Peking. The German ambassador was murdered amid a wholesale butchery of native converts and their teachers. The European community became closely besieged in the Legation quarter; and for a time Europe was horrified by its belief in a general slaughter. A force of mixed nationalities, hastily pushed to the rescue, came in time to relieve this hard-pressed garrison. The Chinese Government took to flight. The English, French, Russian, German, and Japanese troops, who had been gathered to the scene of conflagration, were put under command of Count Waldersee; but international jealousies could hardly be dissembled, and more than once these ill-joined allies had almost come to blows with each other. The Chinese soldiers they easily dealt with; but more serious proved the resistance of Chinese diplomacy, armed with the cunning to play off one covetous Christian power against another, their own hands held by a fear that the ruin of the common enemy might involve the whole civilized world in war. Meanwhile the difficulties of the country were increased by the huge indemnity (£65,000,000) demanded by these collective plaintiffs, in addition to the debt already incurred to Japan, and that held by European creditors.

Such a succession of blows cannot but have shaken at once the Chinese Government and the self-satisfaction of the people, whose apathy, their innate conservatism, and the very vastness of the empire made China slow to move. In certain quarters, in the ports, among the merchants, and through the influence of travelled Chinamen, a better appreciation of Western civilization, at least in its material aspects, began to make way. Railways were suffered, telegraph wires were extended over the empire, newspapers were printed, reforms talked of, ships and steamboats were bought, modern arms manufactured, and grudgingly introduced.

To this movement of reform a marked impetus came through the success of Japan in its war with Russia. "Young China" asked itself whether such a

lished about the end of the seventeenth century by imperial command, contains nearly 45,000 such signs, many of them pronounced alike, and only to be distinguished from each other by the tone; a number since augmented through new facts and ideas; only a few thousands of words, indeed, being current in common use. The characters are written in columns from top to bottom of the page. Once mastered, they make an invariable medium of communication which gives unity to the national language; but this classical form appeals to the eye rather than the ear. In speech, a language depending greatly on slight variations of tone easily degenerates into dialects, which differ so much in separate provinces

Chinese Graves

Photo Valentine

that a Chinaman from the north may be unintelligible to his southern fellow-countrymen, and even educated persons have often to make their meaning plain on paper. Among the upper class, however, the court or "mandarin" dialect supplies a common standard. The complete knowledge of such a tongue makes a long task; yet some European scholars have succeeded in equalling Chinese scholars in their familiarity with it, while most foreigners are content to communicate with the natives in that jargon which, under the name of "Pidgeon English", has sprung up about the ports—an absurd mangling of English with an admixture of Portuguese words left by the first traders here.

That reading and writing are common is shown by the frequency of signboards and placards which deck the streets of a Chinese city. Popular education is stimulated by the opening of the public service to literary merit as understood in China. There are schools, sometimes endowed, in every village, and tutors in wealthy families. Knowledge is looked on as so much part of religion that respect must be shown to the most worthless scrap of written paper, and teachers, however poor, are held in esteem. The Chinese boy is a teachable little fellow, trained from the first to repress his spirits and cultivate that subdued temper which helps him to spend years in becoming familiar with the characters of the

language and committing to heart the flowers of its literature. The ambition of every family is to rise to the mandarin class in the person of one of its members. Only the sons of barbers and actors are excluded from competition for this coveted prize. In his teens the youth steeped in Chinese history and philosophy may present himself for examination at certain centres, where the candidates, to the number of thousands, are boxed up for days together in separate cells. Thus their ordeal seems a physical as well as a mental one, and so strict are the rules that if an overworked student die under it, as may well happen, the door must not be opened, but his body might be dug out at the back. The test is chiefly one of memory; but besides acquaintance with the classics, candidates have to produce original essays and poems constructed upon approved rules. The passing of this standard is what may be called taking a bachelor's degree. The successful scholar can next proceed to the higher grade of master. The final stage is the doctorate, bestowed only by the Academy of Peking, after which the young genius is qualified for any post, not always in youth, indeed, for men go on failing at these examinations till the end of their lives, then, at the age of eighty or so, may sometimes be granted a sort of *ad misericordiam* degree. Failure is the rule, the graduates counting by hundreds, the aspirants by thousands. There are not nearly enough posts to employ all the successful candidates; and if all stories be true, interest now comes into play as well as merit; it is said that degrees, too, can be bought. A large majority of the graduates are thrown back into life as the class of *literati*, secure of respect and fairly in the way of earning a living somehow or other, though also they may be found in the most humble positions, perhaps through defects of conduct or character. The educational effort which has brought them to that point chiefly consisted of cramming up books which contain a maximum of words to a minimum of wisdom, so that this haughty class by no means stand out among their countrymen through enlightenment and enterprise, often indeed prove the most pig-headed enemies of progress. The more fortunate graduates become mandarins—as we translate the name through a Portuguese word,—ranked in classes distinguished by the buttons on their cap and other insignia; and these may rise to any dignity under the throne that bestows such coveted badges of honour as the yellow jacket and the peacock's feather. There is an order of hereditary nobles in China; but their birth does not qualify them to take part in public affairs. (The above paragraph must now be revised in the light of what is said on p. 74*b*.)

The magistracy produced by this system has more respect from the Chinese than from foreigners. There are good mandarins as well as bad ones; but the type falls very far short of our standard in public duty. They are poorly paid, which readily drives them to those illicit means of gain that by the nickname of "squeeze" are here the rule in all transactions among every class. The servant, the *comprador* or buyer, the officer of justice, everyone expects to get some commission out of all with whom he has to do, the extortion being so general that it can hardly be called secret. No doubt more ceremony must be used in tickling the ear of a mandarin than in oiling the palm of his lictor; but that most officials are open to dishonest persuasion seems taken for granted, and hardly resented by the people. The theory of justice here is admirable. In the court-yard of every judge hangs a bell or gong, by which any injured person may summon him forth to listen to a complaint at any hour. The judge is supposed to be checked by appeal to his superiors, and will be found humbly demanding

punishment for himself if he be held to have given a wrong decision. But all such forms ill-disguise the fact that a civil suitor can seldom get an effectual hearing without money, if not for the court, at least to bribe its officers.

Chinese law is reproached with the cruelty of its punishments, which figure so largely in our books about China; its torturing of witnesses as well as prisoners; its slow and horrible executions in certain cases; its torment of the *cangue*, a portable pillory that must be worn round the neck night and day so that the prisoner cannot lie down; the kneeling for hours before a magistrate upon chains or rough stones till the poor creature will confess to anything; and the free use of the bamboo cane always ready at each seat of justice. But it must be remembered that the educated class is exempt from degrading punishments, and that the ordinary Chinaman is less sensitive than Europeans under pain. A man condemned to the stick has no difficulty in hiring someone to take his thrashing for a consideration; and even in cases of capital punishment substitutes are found and accepted. As to the state of the prisons, that has so often scandalized European travellers, they hardly might be said, making allowance for different conditions, to be worse than our own were a century or so past. The ordinary offender does not much resent rough and ready inflictions, even if undeserved, and as little sympathy is felt for his case as in England for the innocent and nervous witness who without redress may be mentally tortured by a certain class of Old Bailey barrister. It must be confessed that, with all their superficial politeness, the Chinese are a cruel, at least an unfeeling people, who, if tough-skinned themselves, enjoy the sight of punishments and executions like the bullies of our old public schools. The horrible butchery of a lingering death by being cut to pieces, like our own hanging and quartering, has now become a form, the criminal being mercifully put out of pain. Other capital punishments are beheading and strangulation, and persons of rank are indulged by an order to commit suicide, for every Chinaman a ready way out of his troubles. General Tcheng-ki-Tong rather tries our faith by his assertions as to the rarity of executions in his own country; but it certainly appears that the mass of the people go in little fear of the law, especially as they are given to settle their disputes by family authority, or in the guilds that exercise so much secret power, sometimes by such violent proceedings as have taken their name from Judge Lynch. A mandarin is limited in oppression by the force of public opinion. His staff are more men of the pen than the sword; he has slight physical force at command, and can seldom go too far, nor even far enough in restriction, without the risk of stirring up popular tumult which he has not the means to repress, and which may cost him his office. An ill-used individual, too, has always the heroic resource of killing himself before his oppressor's door, so as

The Cangue Punishment. Thief chained to the spot where he committed the offence

to haunt the house with his vengeful spirit. As to the practical result of the system, Mr. A. H. Smith, a well-known authority on Chinese ways, declares that, before the Boxer troubles, life was safer in Peking than in New York; to which another writer bluntly adds that Chicago beats China for official dishonesty.

The corruption of the mandarins is not so manifest, perhaps, in the administration of justice as in the neglect of the public interest and the embezzlement of public funds. Revenues are "squeezed" for the benefit of the collectors; roads and embankments go to ruin, while the officials charged with repairing them grow rich; officers draw pay for a thousand men, while their ragged and ill-armed regiment does not number half as many. All this dishonest service is cloaked in high-sounding expressions of duty and zeal such as blunt Englishmen call humbug. The Chinaman is bound up in ceremony, etiquette, and fine words. His conversation is carried on in hypocritical superlatives. Dr. Morison (*An Australian in China*) gives this amusing specimen of the style which the well-bred Celestial thinks fit for addressing a stranger.

"'What is your honourable age?'

"'I have been dragged up a fool so many years,' you politely reply.

"'What is your noble and exalted occupation?'

"'My mean and contemptible calling is that of a doctor.'

"'What is your noble patronymic?'

"'My poverty-struck family name is Mô.'

"'How many honourable and distinguished sons have you?'

"'Alas! Fate has been niggardly; I have not even one little bug.'

"But if you can truthfully say you are the honourable father of sons, your interlocutor will raise his clasped hands and say gravely: 'Sir, you are a man of virtue; I congratulate you.'

"He continues: 'How many tens of thousands of pieces of silver have you?' meaning how many daughters have you?

"'My *yatows* (forked heads or slave children), my daughters,' you answer with a deprecatory shrug, 'number so many.'

"So the conversation continues, and the more minute are the enquiries the more polite is the questioner."

By general consent of observing strangers, all this ceremoniousness holds in solution much real courtesy and consideration for others, of the kind that implies culture of the feelings. The Chinese are outwardly the politest people in the world, and not the least so in inward disposition. Their innate respect for age cannot but prove a school of manners. The father of a family is vested with fullest power over his descendants; while the most appalling form of execution punishes the rare crime of parricide, a guilt extended to the slightest violence against the sire whom his offspring learn to reverence from the cradle. The son comes forward to give his own life for his father's; indeed, it is not uncommon for a Chinaman to offer himself as a substitute for execution that his family may enjoy the price of his self-sacrifice. The ties of blood are thus drawn stringently together. Each member is looked on as responsible for the acts of the whole. If one come to honour, it is reflected on all his kin. If he commit a crime, his nearest relatives may be punished for not having brought him up well, or prevented him from wrong-doing; even the neighbours, indeed, may be held to blame for setting no better example. On the whole this is a peaceable people so

far as blows go; but the men, and still more the women, are given to violent outbursts of verbal wrath, sometimes in the form of a soliloquy shrieked out to creation in general; then the favourite topic of abuse will be the character of the adversary's forefathers for many generations, which presents itself as his most sensitive point mentally, as physically his tail may be caught hold of in the Chinese form of coming to fisticuffs.

Natural Foot and Compressed Foot of China Woman

The Chinaman marries young, his bride being chosen for him by the two families, and he may never have seen her till they are bound together for better or worse. If disappointed in his hope of offspring, he may take other wives; but monogamy is the rule. Not to marry at all is looked on as an offence against society; and every man considers his life as incomplete till he have a son who may perform to him the duties of filial piety. Daughters are much less valued. In spite of all contradiction it appears that infanticide has been common, especially in some parts of the country, and in times of scarcity; then it is female children who are more readily sacrificed. Girls are not welcomed in a family, and little is spent on their education; the father may sell them into a kind of domestic slavery, which differs not much from their married life. Women's rights make no burning question in China; the Chinese wife has the comfort of content, and though her husband may beat and snub her at will, there seems to prevail a fair average of domestic happiness. The most painful of woman's wrongs is one enforced by the tyranny of custom, the senseless crippling of the feet that costs a girl years of torture, till the toes are squeezed under, the

Photo J Thomson

Chiropodist, Peking

instep forced upwards, and the whole foot dislocated into a club, on which the poor creature hobbles in a shoe three or four inches long—one reason for women not being much seen in the streets. Among the Chinese proper this counts as a necessary mark of respectability, yet it is not practised by the dominant Tartar caste; and the better classes now begin to recognize the cruel absurdity of it, native leagues having been formed to put down the prejudice by which a girl with natural feet cannot hope for an honourable marriage. With men the pigtail on the shaven head, by dandies plaited with silk till it almost reaches the ground, has been the same necessary ornament, so that a Chinaman would almost as soon lose his life as his tail. Yet this coiffure was originally a badge of conquest, imposed by the Manchus and at first stubbornly resisted. In the south, where turbans are worn, people have forgotten how these were adopted to cover a shame. The Taiping rebels let their hair grow freely in sign of patriotic disaffection; and the revolution now brings about a great shearing of pigtails.

Blind devotion to custom is a strong feature of Chinese life; another is the influence exercised by many leagues, syndicates, guilds, and secret societies, whose influence is all-pervading, acting sometimes as a co-operative or trades-union, sometimes as a social power, and sometimes as a focus of political conspiracy. Workmen unite to keep up their wages, trades to enhance prices, servants to coerce their masters; even the beggars have a guild which serves as an anti-charity organization. The clannishness of family feeling also comes into play, so that the stranger who would have his own way here finds himself struggling in a net-work of hindrances, and in the end has usually to give in, submitting to the universal system of "squeeze" by which all relations are made to run smooth.

There is a class of gentry, persons of wealth and learning, who exercise a certain influence. At the other end of the social scale comes the mass of coolies who live from hand to mouth. Among the rest of the people distinctions appear not very strongly marked, though they are divided into the four classes, literati, husbandmen, artisans, and traders. The strong point of the Chinaman is his industry, well displayed in the system of minute and laborious agriculture that enables his country to support such a thick population. The patient endurance of the coolies, too, is admirable, who for a few pence will toil all day under weights of a hundred pounds and more. Poverty nourishes the characteristic virtues of the people; among the peasantry of out-of-the-way districts a stranger is like to find more courteous welcome than among the townsfolk, though often, indeed, the foreigner must put up with being stared at as a monster by men, and fled from as a bogey by children. Strongly rooted to his birthplace, unquestioningly wedded to his ancestral customs, and with small outlook on the world beyond a narrow circle of familiar neighbours, who are likely to be in a greater or less degree his kinsmen, it would be a wonder if the ordinary Chinaman were not astonished by strangers out of his native good manners.

In the towns he takes kindly to shop-keeping and dealing, small profits and quick returns being his motto. Buyer and customer keep wide-awake to take the slightest advantage of each other; keen bargaining is the rule in every transaction, and the true Chinaman by no means considers himself to lose "face" over sharp practice. The better class of merchants, indeed, are noted for strict faithfulness to engagements, based upon experience of honesty being the best policy. Where the individual may be tempted to dishonesty, he is kept

in check by the rules and penalties of his guild that watches over the common credit and welfare. Similar societies, more or less wisely, look to the interest of different crafts. The fixing of hours of labour and wages, the restriction of apprentices, boycotting, and strikes might all have been imported by us from China; and, as was the case in England, the power of trades-unions has been shown by the riotous destruction of machinery introduced to revolutionize one or another industry. Pawnbroking is another institution very familiar in China, where getting into debt, at high interest, is as usual easier than getting out of it.

Street Scene, Peking From a photograph

Trade here is organized in a manner out of keeping with the cumbrous monetary system. The Chinese are poor arithmeticians, who like to count loosely in tens,[1] and make much use of the abacus or calculating table. Paper money has long been used by them, but the only national currency was the petty coins of copper and tin known to us as cash, having a square hole in the centre by which they can be strung into hundreds and thousands. A handful of these go to a penny, and in this form one needs a coolie to carry a few shillings to market. But still more inconvenient is the uncertainty of value. Spurious cash are in circulation, to be passed off on the unwary customer. A nominal thousand cash, as counted in various parts of the country, is not always a thousand; in one place it is only a third of the real number. Then the tael or ounce of silver, to which the thousand cash ought to be equal, itself varies in purity and value. There is no such coin; but lumps of silver are cast, known as "shoes" from their shape, and in making payments pieces of these will be taken

[1] An exception to the decimal rule is the *catty*, or pound, which contains 16 taels = $1\frac{1}{3}$ oz.

by weight. A traveller may have to waste an hour daily in adjusting his funds with the local standard of value. Former attempts of the Government to supply a more convenient coinage have been frustrated by official dishonesty; now, however, a new national currency is begun with an issue of ten-cash pieces, worth about one-third of a penny. Until this wins popular confidence, it is not surprising that foreign coins find a ready circulation in the sea-board provinces, especially the Mexican dollars, worth at present about two shillings, which have long formed an international currency in the Far East, and are cut up into wedge-shaped pieces in making change. Sometimes a lump of opium is accepted as a convenient mode of payment, or a brick of tea in the distant provinces. The measure of distance also is a varying one. The *li* is commonly taken as a third of a mile; but, like the German *stunde*, it seems to be locally expanded or contracted according to the difficulty of getting over the ground. The same uncertainty applies to weights, the Chinese having a lazy love of round numbers and a contempt for accuracy; then the last thing counted by him with any precision is the flight of time.

While the townsfolk live closely shut up, they carry on their business much in the open air, at booths and stalls, about which rises a busy hum of handicrafts, mingled with the chatter of bargaining and clatter of their clumsy coins. The narrow thoroughfares, crowded with people, through whom vehicles plough their passage, are darkened by awnings above, and by a forest of gaily-painted sign-boards and banners swinging across the way. Travellers have often dwelt on the shops of a Chinese city,[1] that make such a show of paint and gilding, and, besides advertising their wares, display moral maxims for the edification of passers-by. Another lively feature in the streets is the itinerant vendors of eatables, quack medicines, lanterns, &c., and the number of artisans who stand

[1] "The prettiest of all are the fruit shops, with open fronts", says Archdeacon Moule (*New China and Old*) in his description of Hang-chow. "Next door to the fruit shop is an establishment entirely devoted to hams. They hang in long rows; skinny, dry, thin, with but the remotest resemblance to their Yorkshire relatives, yet not altogether unpalatable. Then comes a noisy blacksmith's forge, and a gold and silversmith's shop with beautiful work, in purest metal, exposed in little glass boxes on the open counter. Then a row of hat and cap shops, where you can buy a mandarin's button, red or blue or white, and hard by a tailor and outfitter displays his silks and satins, and blue and green cloth. The fur-lined and wadded robes are put away now (it is early summer when we enter Hang-chow), to preserve them from moth and the moist heat of the warm weather. Here we pass a bird-fancier's shop, with canaries from Japan, larks from the banks of the Ts'ien-tang, a parrot or a parraquet, pigeons, tiny rice birds, and perhaps a squirrel in a large cage. Then a shop for the sale of pipes which make a brave display, with their longer or shorter bamboo handles, some being fully four feet long, their bowls of brass or white metal brightly burnished, and the elaborate water pipes all of brass shining brightly also. Then a medicine shop, and a grocer's establishment well stocked with goods from the eighteen provinces, and specialities from Peking and Canton. Then a row of bookshops (the Chinese are fond of grouping their trades together the bookseller's lane, the cobbler's street, and so on, being well-known localities). The books are piled away neatly and orderly in shelves, some of them in separate paper-stitched volumes, some enclosed in boards, plain or varnished, and tied by silk or cord strings. Scrolls in different colours, and with pictures and mottoes inscribed upon them, may also be purchased in these shops, but booksellers are seldom stationers. For paper, plain or ornamental, and envelopes (some of them most tastefully illuminated), and for pens (the Chinese hair-pencil) and ink (fragrant and prettily ornamented sticks) you must resort to a special stationer's shop. Then with short intervals we meet a succession of rice shops, where peas and wheat and millet are also displayed for sale. Now as we hurry along there is a loud clanging, for we are passing a brazier's shop, who is hammering and tinkering his goods, and here, too, is a musical-instrument seller, with purchasers testing his gongs and horns and cymbals. And so, first towards the city hill towering above us, and then turning north-eastwards, we press through the crowded, busy streets, till at length, after long struggling and pushing, we emerge into quieter scenes. Now we walk under a long, white, dead wall, with umbrageous trees throwing their branches over the outer pathway, and mistletoe tufting some of the boughs. The wall is broken now by the gateway leading into one of the chief Yamuns, or magisterial residences and offices in the city, a mixture of meanness and grandeur well in harmony with Chinese character. The gates are in tolerable repair, but the official poles within are some of them rotten, some half blown down by a recent gale. These poles rather resemble masts with yards, and with boxes like cross-trees, which are the favourite resort of jackdaws and the Chinese starling. The courts are well paved, and as one sign of the blending of the classes in China, the poor neighbours go in unchecked and dry their wheat and paddy or their clothes in the great man's yard."

waiting to be hired, or go about to ply their trade—tailors, cobblers, barbers, blacksmiths, and so forth—like the knife-grinders of our cities. The narrow ways are often blocked up by half-naked coolies carrying burdens balanced on a bamboo pole, or sedan-chairs, which may be hired at stands, and are much used by the wealthy class. In the north these are replaced by carriages, and the Japanese jinricksha has been introduced, a sort of grown-up perambulator drawn by men. Ladies cannot walk far on their club-feet, while all fastidious persons find good reason against going on foot in the filthy state of the thoroughfares, disgusting to more senses than one. Dirt and decay are common features of

Photo. J. Thomson

Chinese Street Industries

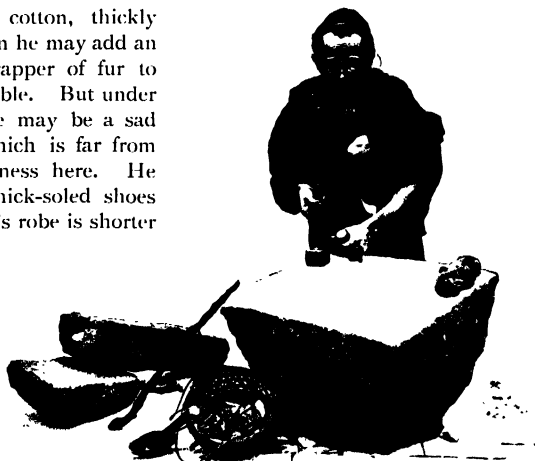
From left to right are seen (1) Soup Merchant and his Customer, (2) Public Scribe, writing to dictation, (3) Itinerant Barber, and (4) Wood-turner and his Customer, who is examining a ladle.

China, where a city may enclose in its walls huge palaces and parks mixed with rubbish-heaps showing where once were the homes of a close-packed population. At night the state of the narrow, irregular, and ill-paved ways makes the carrying of lanterns a necessity.

The general style of building is flimsy and monotonous, rich houses being distinguished from hovels rather by size and decoration than by architectural pretence. There are few ancient structures beyond the temples and the well-known tall pagodas, believed to have been suggested to native architects by the stem of the bamboo; but these are readily allowed to fall into decay. Most of the houses are one-storied, consisting of a roof on wooden pillars, between which the walls will be filled in with badly-baked bricks. The shape of this building, with its quaintly up-curled eaves, seems modelled on a Mongol tent. In the case of rich families the rooms are extended round two or three courtyards, behind which comes a garden, all enclosed by a blank wall with no windows to the street. The

Lady (North China) in fine dress and wearing nail protectors

roof is often adorned with coloured tiles, and the pillars and cornices are ornamented with carvings. Among the poor, also, groups of what we should call families, making a clan of kindred, live enclosed in one yard, as in the country they huddle together for protection in villages or walled towns. In front of the houses, which to satisfy superstition ought to face south, are carved or painted monsters to frighten away evil spirits. The windows are usually of oiled paper, or with open woodwork shutters, though glass is making way through the example of the foreigner. The floors are seldom carpeted. The furniture consists of chairs, tables, and bedsteads, stiffly uncomfortable to our notions, but often prettily made of costly woods, while poorer families put up with the all-useful bamboo. Paintings and illuminated or embroidered moral maxims give decoration to the walls. Coffins figure among the furniture, a Chinaman thinking it well to keep such a *memento mori* by him. Fireplaces are wanting in these dimly-lit interiors, but chafing-dishes filled with charcoal come into use, and, in the colder parts, brick stoves serve at once for sleeping bunks and cooking ranges. The scarcity of fuel makes this a luxury, and foreigners shiver in the damp and draughty houses, where the people keep warm by loading themselves with layers of wadded garments and quilts.

Chinese clothes are loose and flowing, as it is judged ungraceful to show the outline of the body. The working class, indeed, often go naked from the waist, even in severe weather; but a respectable citizen covers himself from head to foot in an ample robe, above a vest and trousers, of silk or cotton, thickly quilted in winter, when he may add an upper jacket or a wrapper of fur to make himself comfortable. But under showy garments there may be a sad lack of cleanliness, which is far from coming next to godliness here. He wears soft, clumsy, thick-soled shoes of cloth. The women's robe is shorter than the men's, showing their indispensable trousers and often handsomely embroidered shoes. Close-fitting caps are much worn, or broad straw hats; but the Chinaman seems insensible

Chinese Stone mason

to the force of the sun on his bare head. Married ladies have their hair done up in elaborate forms, adorned with flowers and jewels; they daub their sallow faces with paint; and those who have the means spend freely on rich and gaily-coloured silks. With men over a certain age, a thin moustache passes for becoming, or a pointed beard. Persons of dignity are proud to wear large spectacles, and dandies to have long finger-nails as a mark of their being above manual labour. Gentlemen carry umbrellas, sometimes singing-birds in cages, as an odd point of display; also mirrors and fans may be seen in the hands even of beggars. Cotton is the common material for dress, and blue the favourite dye that colours a Chinese crowd. Silk prevails in some parts of the interior; wool is woven only in the west.

We are in the way of making very merry over the diet of the Chinese, who are understood to have a sweet tooth for dogs and rats. But such fare seems to be relished only by those who are glad to get anything to eat. The staple food of the people is rice, or other grain, with vegetables, beans and cabbages among the commonest, fish and pork as the general meat, in some parts goat's flesh or mutton, seldom beef, the ox being too valuable to be given to the butcher; but horses, donkeys, camels, any creature, even if it dies of disease, makes a feast for the lower class. They do not use milk, butter, or cheese. Fowls and eggs are much eaten by those who can afford them; so are shell-fish, ducks, geese, pheasants, and venison. Among delicacies come many things that do not appeal to our tastes, tender bamboo shoots, cooked sea-weed, sharks' fins, frogs, the dried sea-slugs known as *bêche de mer*, and the birds'-nest soup, the "stock" for which is largely imported into China. Sweetmeats and fruit, too, figure largely in the *menu*. The Chinese are excellent cooks, producing succulent results from materials as to the nature of which it is not always well to enquire too closely, and usually spoilt, to our taste, by abuse of grease and high flavours, as of garlic, while some of the Chinese *bonnes bouches* strike us as insipid. An elaborate banquet, hours long, with its succession of peculiar luxuries, is rather a terror to Europeans, who are awkward in handling the chopsticks that serve those to the manner born for knives and forks. Tea is a universal drink. Wine also is drunk warm, and when water is used it will commonly be boiled, which seems as well in view of the utter neglect of sanitary precautions.

The national tolerance for dirt helps to spread disease, little checked by the ignorance of native doctors, whose practice hardly goes beyond the use of absurd nostrums such as were used in mediæval Europe, spiders, cobwebs, shavings of horn, lizard skins, and what not. The Chinese have a vast respect for quackery, and love to dose themselves with drugs, as mendaciously advertised among them as among ourselves. Religious prejudice, as well as want of anatomical knowledge, restricts surgery, though their quacks are much given to acupuncture in cases of rheumatism or dyspepsia. Small-pox is an ever-present plague, in spite of inoculation, long practised here, and vaccination, more recently introduced. Epidemics of cholera, fever, and diphtheria find a breeding-ground in the filthy cities, where beggars are suffered to spread infection by the exhibition of their loathsome sores. It is stated, as the lowest estimate, that in one year about a twentieth part of the Peking population died of cholera. As an example of their idea of dealing with such an epidemic, the Rev. G. Cockburn declares that when cholera broke out at Ichang, the city walls were manned

with soldiers, who with gongs and drums and blank firing raised an uproar that might scare away that invisible enemy. In some districts leprosy is common, as goitre in others; and the bare bodies of the coolies more often than not show marks of skin diseases which seem to cause them less discomfort than is the effect on fastidious eyes.

For music the Chinese have a strong taste that does not accord with that of foreigners, and the cadenced tone of their speech readily rises into a sing-song with which they delight to cheer themselves at work. Gongs, bells, cymbals, and other noisy clangings dominate their popular orchestras, where also horns, flutes, and stringed instruments help to make up a din the main merit of which seems to our ears to be in its noisiness. An unkind story represents a Chinese audience as sitting solemnly silent through the first part of a European concert, then bursting into applause when the musicians began to retune their instruments. But though Chinese music lacks harmony and half-tones, it is said by experts to have charms of its own, and is much cultivated by the educated classes at their homes and at musical clubs. It appears, too, that native amateurs are beginning to take kindly to more refined performances of European music, and a favourite toy in some bettter-class houses is music-boxes playing both Western and Eastern airs.

In pictorial art they have been more advanced, though here, too, there is a great deficiency in their ignorance of perspective and anatomy, and in the stereotyped conventions of composition by which their artists guide themselves. Their merit is in careful drawing and rich and minute colouring, especially displayed on the old porcelain which gave models to Europe. The effect of European models, in turn, on the native artists has not been happy; and, like other things in China, its art has decayed in the general paralysis of national life under the present dynasty; but still its painters can produce very pleasing effects in landscape or the faithful copying of natural objects. Sculpture, so far as concerns the representation of the human form, is almost unknown; but they make representations of monstrous beasts, and the carving of houses and temples often seems too good to be wasted on poor material. The place of statues is taken by numerous arches and tablets erected in memory of men and women whose virtues seem to deserve record, or whose family can by payment secure official licence for such a posthumous honour. Images of bronze and other material abound in the temples, except those of the severe Confucian creed; and much fantastic ornament is often expended on the architecture and fittings of these numerous structures, which are held in little reverence, according to our ideas, being often used as theatres, meeting-halls, or lodgings for strangers.

Landscape-gardening is an art in which the Chinese excel, as rudely shown to us on the willow-pattern plates. They delight to lay out an enclosure with mounds, rockeries, water, bridges, winding paths, arbours, and pavilions, among which are cultivated beds of bright bloom and gay creepers, often arranged so as to form a floral calendar. Their poetry turns much on the beauty of bud and blossom, so marked as to have earned for China the title of "Flowery Land". In the country, as well as in the gardens, spring paints the green groundwork with lovely hues, whole hillsides glowing with blossoming trees, fields of clover, carpets of red and yellow azaleas, wreaths of wistaria and other creepers. "Fancy blue larkspurs and yellow jasmine, and glorious coloured

oleanders, and begonias, virgin lilies, and yet taller white lilies, and gardenias, and sunflowers, all growing wild!" exclaims Mrs. A. Little, who is enthusiastic also over the feathery bamboo, the quivering light-green branches of the tallow-tree, each shoot tipped with almost scarlet young leaves, and covered with yellowish tassels; the sturdy but graceful soap-tree; the oranges; the nut-trees; the heavily laden plum-trees, among which flit glorious butterflies like winged flowers.

In such scenes the Chinese love to spend their hours of holiday leisure, not very frequent in most cases. They have no sacred day answering to our Sunday, and are too keen about gain not to stick closely to business. Certain

In a Chinese Garden

Photo J Thomson

public holiday times are generally observed, the Feast of the Dragon, and that of the Moon, which last nearly a week, and the month-long Saturnalia of the New Year, here coming in February, that is not altogether amusement, for now all bills must be paid, that the honest man can begin his year with a clean balance-sheet, else he may think right to commit suicide. This is closely succeeded by the Feast of Lanterns, when the whole empire becomes illuminated by lights shaded in rainbow-coloured shapes of dragons, elephants, lions, flowers, &c. Like other Orientals, the people are childishly fond of fireworks and explosions of powder, with which they celebrate every occasion of mirth or mourning. A sport in which old men too take delight is the flying of kites, paper eagles as they are here called, sometimes of enormous size and elaborate shape, cut into forms of birds, butterflies, dragons, and so forth, or equipped with vibrating cords that give forth sounds like an Æolian harp. A favourite game with boys is fighting their kites in the air, trying to hook a rival's so as

to drag it down, when it becomes the property of the victor. The flying of pigeons is another common diversion, the birds being frequently equipped with a bamboo whistle by way of artificial voice.

Theatrical performances are very popular, given in temples, in the open air, or in some temporary enclosure like our circuses, or bespoke at a private house. There is no scenery to require a well-fitted stage. The parts of women are taken by lads. The plays are sometimes longer than Wagner's and Schiller's cycles, so that a complete drama extends over several representations, but the spectators never seem to tire of what strikes strangers as a very monotonous exhibition, uniting in a truly Chinese manner fine sentiments and unedifying actions, spiced with low jests. Puppet shows are run after in the streets, where a Chinese version of our friend Punch is much admired. Clever jugglers, acrobats, ventriloquists, afford other popular diversions, as do boat-races. But the most general amusement of the people is gambling, carried on everywhere in defiance of formal prohibitions. Public gambling-houses are said to be held even by the magistrates whose duty should be to put them down. The priest will sometimes let the devotee play double or quits for his fee. So infatuated is the spirit of speculation that poor men often go hungry, having played away their last coin to dealers who unite the business of a restaurant and a hazard table. It seems typical that the Chinese will bet upon the result of examinations rather than of races. They use dice, dominoes, roulette, lotteries, and such devices of guessing as those with which some of our enterprising newspaper proprietors have recently tried to sail close to the law, which in our country does not so complacently lend itself to public demoralization. Cards are much played at home, the packs being more numerous and smaller in size than ours. Another game is chess, played in two forms, which also differ from ours, one having a larger number of pieces. More objectionable pastime is the cock-fights of which the Chinese are inveterate amateurs; and their cruelty comes out likewise in the pitting of crickets and other animals against each other.

One reproach cannot be made against this people: a drunk Chinaman is a rare sight. Grape wine is exceptional; what is here called wine being rather beer, made from rice, and a stronger spirit *samshu* is distilled from millet or other grain; but in their use the Chinese are more moderate than in eating, which, with a great choice of indigestible dishes, becomes a snare to rich men. Tobacco is much smoked out of small pipes. Their worst indulgence is in opium, apparently introduced among them in modern times and now spread widely over the country. Our part in the propagation of this vice is not one to be proud of, but the guilt is not altogether ours. Even while the Chinese Government affected high moral indignation at the forcing of Indian opium on their country, the cultivation of the drug went on, nominally forbidden, but grown before the eyes of every mandarin, who himself often used or even traded in opium while professing to hold it an accursed thing. Dr. Morison, travelling over 1700 miles of China, reports that he was seldom out of sight of poppy fields. In the opinion of many observers, missionaries have been moved to exaggerate the evil effects of opium smoking, practised in some parts by half the male population. In the case of the majority, it seems little more harmful than our workmen's beer; and regular smokers often display enviable vigour, if others are turned into wrecks of humanity like the victims of our own national vice. Some

go the length of maintaining that the moderate use of opium is wholesome under the circumstances of Chinese life, especially in the marshy districts; but this indulgence, where means allow, is one that readily breeds degeneration. The late Government was so sensible of the evil that it struck vigorously at the cultivation of opium, to be decreased by one-tenth yearly, so that by 1916 the internal supply should be exterminated. Whether or no in consequence of this decree, the opium pipe appears already less used, too much replaced indeed by exotic drunkenness and by the morphia habit that has also called for measures of prohibition, while the smoking of cigarettes is noticed as a new custom both here and in Japan.

THE MIDDLE KINGDOM

It might be a tedious task to enumerate the unfamiliar names of some score of Chinese provinces, many of them as large as a European kingdom, with their twelve hundred or so of districts equal to counties, and further subdivisions. Let us rather survey the country on the lines of its great river basins, where we shall come upon its most renowned cities and chief centres of trade.

The rivers, with their net-work of natural and artificial by-waters, make, in most parts, the main routes on which travel and commerce are served by various craft, towed, rowed, or sailed. The boats may be turned into sleds in winter,

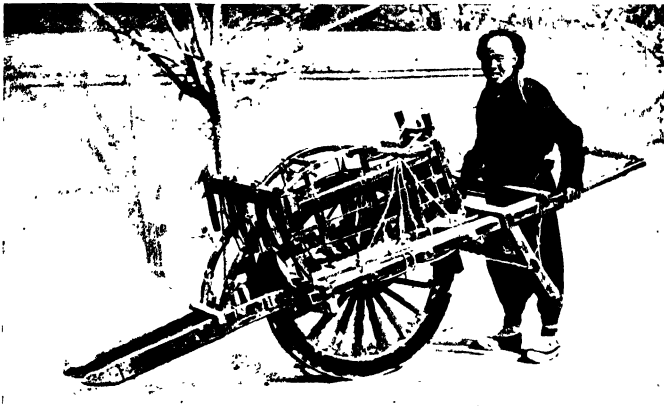
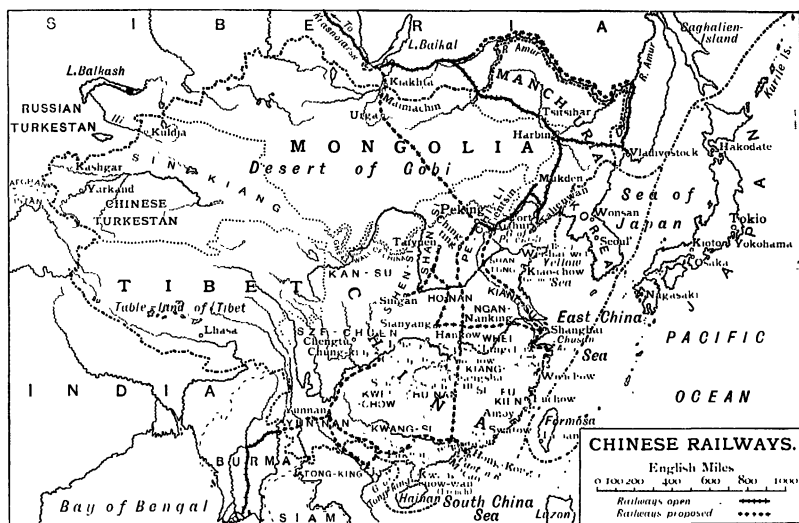



Photo W. H. Rau

Chinese Wheel-barrow

and, as Milton had heard, sails will be sometimes fitted to the creaking wheelbarrows that are the vehicles best adapted to China's bad roads. In times past the cities were joined by paved highways, but these have often been allowed to fall into such a ruined state of ruts and quagmires that they seem less help than hindrance to traffic. Most of the roads are no better than tracks, perhaps on the raised banks of irrigated fields; or in hill countries they may be rough stairways, that give sure enough footing to the experienced ponies, mules, and donkeys of the country. Porters come much into requisition, and the gig of

British respectability is here replaced by a chair, which the traveller of any pretension must hire, even if he find it more convenient to walk, as no Chinaman cares to do if he can be carried. The rivers are crossed by stone or suspension bridges, often elaborate works, and where these fail, by ferries or by some such contrivance as a loop cradle swinging dizzily on a line. Inns and tea-houses are common on frequented ways, but European travellers have bitter memories of their dirt, noise, want of privacy, and other discomforts. Such accommodation is at least cheap. Including his outfit and the wages of his attendants, it cost Dr. Morison about £20 to travel for a hundred days through China.

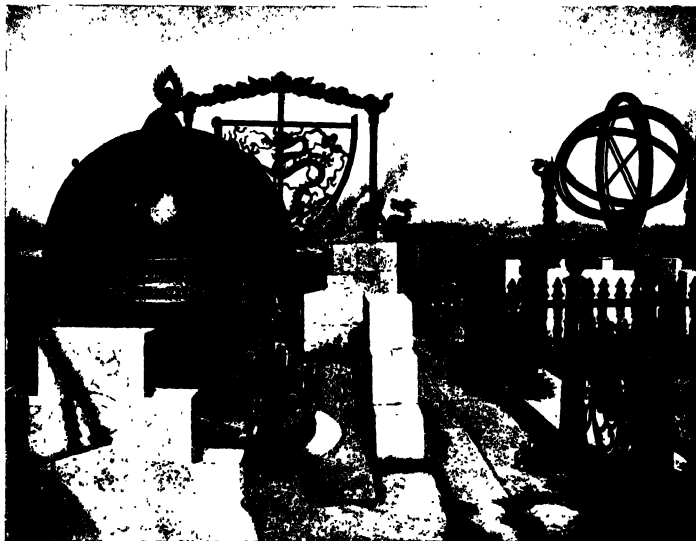
The intrigues of rival European nations undertaking to civilize this empire, each for its own advantage, have been one cause of delay in providing it with

railways, that within the last few years begin to be actively pushed. Another great obstacle to their construction has come from the way in which the country is dotted with graves, like gigantic molehills, in the south taking a horse-shoe form, so thick in some parts that the dead seem to overshadow the living. The disturbance of these by "barbarian" engineers stirred so sore a point with the pious Celestials that for years railway making was at a stand. As to one proposed line the officials demanded that it should not come within 20 miles of the tombs where the Ming emperors repose. The same puerile superstition has stopped mining works, which might awake subterranean demons; and the steeple of a Christian church is looked on askance as a conductor for evil spirits in the air. In the recent troubles about Peking, one of the first effects of anti-foreign hatred was the destruction of such an outrage on the past as a railway. The focus of these troubles will be our best starting-point, where for the last six centuries has been established the imperial capital, within a day's march of the northern frontier, as if the Tartar conquerors would keep themselves always ready for retreat into their native steppes.

The Peiho is a comparatively short river flowing down from the northern mountains through the Province of Pechili into the deep gulf of the same name. The mouth of the river is defended by the Peiho Forts, that came into note through our attack on them in the second Chinese War. Large vessels have to anchor here. Above, the Peiho, blocked by ice for three winter months, runs in crooked bends, making a long and difficult navigation up to Tientsin. Since this place became an open port it has enormously increased in population, believed to be a million or even more. The lower part, forming the European settlement, is marked off from the crowded and dirty Chinese town whose inhabitants have more than once given way to fanatical hatred of the foreigners that brought them prosperity, as in 1870, when the French missionaries and their establishments were destroyed, and again at the beginning of the Boxer agitation, during which the mouth of the Peiho served as our base of operations against Peking. A railway to the capital had already been laid across the flat river plain; and, in spite of all opposition, by the favouring of the noted viceroy Li-Hung-Chang, this line extends down to Taku at the mouth of the estuary, and up the country to a great coal-mining district, then across the north-east frontier it is continued to the treaty port of Newchwang in Manchuria, and by the Trans-Siberian railway links together Paris and Peking.

The journey from Tientsin to Peking, which stands about 100 miles back from the sea, had formerly to be done on rough roads, in one of the bone-shaking carts of this region or on pony-back, unless the more comfortable and leisurely alternative were taken of being towed up the crooked river, here forming part of the Grand Canal. Some days will be spent in travelling thus a distance of 60 miles or so; then the last stage, from Tung Chow, is by land, or by the Canal, as Peking stands some 15 miles off the Peiho, between it and its tributary the When-ho, once a more important stream which has now ceased to be navigable. The road approaching the city from this side was once massively paved, and a century ago seems to have been kept in good repair, but it has now fallen into a chaos of ruts, among which carts and wheel-barrows pick their way in a dusty crowd of burdened beasts and men. The ancient tombs lining it give place to populous but mean suburbs, through which one enters "China's crockery-ware metropolis", woefully disappointing to travellers who remember the old accounts of Peking—*ignotum pro magnifico*—as one of the greatest cities in the world.

"Imagine about 16 square miles of tumble-down bricks, dirty earthen tiles, dusty or muddy thoroughfares, open stagnant sewers, and unlimited filth of every kind lying about, and you have a general and very correct idea of Peking. When you have looked at the great wall of the city from the outside, and passed through the high archway, which is impressive from its size, you expect to find a place of corresponding importance within; but, on the contrary, you see only the beginning of a street, with low, one-storied miserable houses in no way different from the villages you have passed on the way. . . . There were the same unswept dirty streets or lanes, with dull walls on each side—the same low, mean houses. If we came to one of the wider streets it seemed to be only an ampler space for filth. Here and there were large open spaces, where houses had stood. Nothing but mounds of bricks and tiles remained, from which dogs barked at us. Even where there are houses of anything approaching the better class, they are enclosed within walls, and out of sight, so that the very worst

impression is produced upon one passing through the streets of Peking" (William Simpson, *Meeting the Sun*). Another traveller, indeed, speaks of Peking as clean "for a Chinese city", a merit perhaps owed to its wide open spaces and uncrowded streets. The railway, at first kept miles outside of the walls, was, during the foreign occupation of 1901, carried through the Chinese city and up to the massive barriers of the Tartar city.

In population, too, the grandeur of Peking has been exaggerated. Among varying guesses, Mr. Archibald Little's brings it down to a quarter of a million,

The Observatory on the City Wall, Peking From a photograph

while some put it as a million or more. We shall have many such instances of the vagueness of Chinese statistics. Its circuit measures some 30 miles. As is well known, it consists of two main parts, walled off from each other, the Chinese or business quarter, through which one passes into the Tartar City, and within the latter stands the Imperial City of official residences, having in its centre the Forbidden City, an enclosure of gardens and palaces where the emperor kept himself shrined in mysterious state. A certain amount of fusion has taken place between the Tartar and the Chinese quarters; but the imperial citadel was still jealously secluded till it became broken open by the allied forces in 1900. Count Von Waldersee made his quarters in this sanctuary, and foreign eyes desecrated the wonders of its palaces, bearing such titles as "Secure Peace" and "Heavenly Purity", the whole gathering of finely-carved halls, pagodas, and summer houses, half a mile each way, roofed with tiles of imperial yellow, relieved by green, blue, and purple, so that at sunset it seemed a blaze of gold and jewels. Before long a devastating fire broke out here, kindled perhaps by the introduction of a European stove, perhaps by some Chinese patriot in wrath against that "abomination of desolation".

Among the open spaces and crumbling enclosures, where tall hairy Mongols encamp with their camels in winter, Peking shows some fine buildings and monuments of the past, chiefly in the temples and churches of different religions. The best view-point is from the walls, a promenade that is at least clean, one bastion of which exhibits the remarkable bronze astronomical instruments said to have been made by Jesuit missionaries, near which are preserved older apparatus showing what a point of science China had attained more than 600 years ago. The celebrated Examination Hall, where once every three years students sat for their chance of admission to the "Forest of Pencils", China's great literary body, is likened by Mr. Simpson to a cattle-market: 10,000 cells walled in, with towers in the centre, and corners from which watchmen looked out on the candidates to guard against cribbing. This, and the Hanlin College, the "Academy" of Peking, were ravaged by the Chinese themselves during the siege. In the Hall of the Classics, beside the Confucian Temple, the standard books of Chinese literature are engraved upon slabs of marble, from which the emperor was supposed once a year to expound these works to his high officers. A more practical institution is the school set up by the foreign office, where young officials are now taught the languages of the "barbarians".

Within the Tartar City is the "Street of Foreign Nations", where in our time a row of temples and mandarin palaces, each consisting of a group of pavilions joined by cloisters, have been adapted as the Legations of European powers, under whose flags an enterprising Frenchman set up an hotel. It is not easily forgotten how, in the summer of 1900, the foreign community were besieged in this quarter, hastily barricaded like the Residency of Lucknow, and how, with the help of a few marines, they held out for weeks, their fate hidden from the intense anxiety of Europe, till the allied forces were pushed up from Tientsin to their relief.

On the south of the Chinese town the British troops found quarters in the Temple of Heaven, a wide enclosure for the great circular altar, 90 feet in diameter, approached by triple flights of nine steps, all of pure white marble, carved with dragon forms, where the emperor solemnly offered sacrifice once a year. Adjoining it is the Temple of Agriculture, at which he used every spring to set the example of ploughing a piece of land; this was occupied by the American soldiers. Outside the walls lie two immense fortified parks, in one of which stood the rich Summer Palace, plundered and destroyed by the French and English army in 1860, a piece of vandalism that was considered a needful lesson for Chinese pride. Round about, the whole district is studded with temples and Buddhist monasteries, mostly in ruins and with elaborate tombs. One lion of the neighbourhood is the tombs of the Ming emperors, about 24 miles to the north, where a long avenue of tall stone figures of men and beasts, real or fabulous, so lifelike as to terrify horses, leads into a hollow among the hills overshadowing high castellated and wooded mounds, each an enclosure of shrines, monumental slabs, and altars. The chief tomb is the resting-place of the Emperor Yung-lo, who died 1425. Here on a triple marble terrace rises a hall, supported by solid teak pillars, which Mr. Simpson calls the finest specimen of architecture he saw in China.

Farther on in this direction the mountain barrier of China is crowned by its Great Wall, which makes a favourite excursion for visitors to Peking. The way is by the stony caravan road into Tartary, thronged with cattle and pack animals,

past ruined monuments and half-deserted towns, over a plain transformed by the rains into a lake of mud. The ground grows rougher and higher; then, about 40 miles from the capital a rough pass leads through a labyrinth of peaks and chasms to the broken crests along which the wall twists up and down with its towers and crenellated parapets, "like a huge snake turned to stone". This famous fortification of China, originally laid out before the Christian era, is some 2000 miles in length, extending from the sea north of Peking far into the deserts of Central Asia. In some parts it appears only as a mud bank or a heap of stones, but the section nearest Peking stands in solid repair, 20 feet wide and

Photo J. Thomson

leading to the Ming Tombs, North of Peking

about half as high, built of solid blocks of granite and brick, the very transport of which implies a civilization equal to that which reared the Pyramids. Ingenious calculations have been made as to what useful work might have been done with the same amount of labour; certainly it would be well for China if the Great Wall could be broken up to mend its roads. What is here shown to globe-trotters, indeed, makes no fair specimen. It is not even part of the original wall, but a more modern interior loop, which, with the old one, enclosed a military zone as a further defence. Yet it seems as if, at this corner, China had little need of artificial barriers. So near the capital, the heights are ruggedly savage, as described by M. Monnier. "On the slopes every trace of soil has vanished centuries ago. The mountain exhibits its bare skeleton, this, too, assailed by blasts and thunderbolts, its broken masses standing up like dismantled bastions. In this country, where all is decrepitude, nature itself seems falling in ruin."

The Grand Canal is another great work constructed by Kublai Khan for the supply of Peking from the subject provinces. Like our Caledonian Canal it is only in part artificial, its course of 700 miles being a string of lakes and waterways connected by cuttings at enormous expense of labour, a gigantic enterprise for the thirteenth century, which has fallen much into disrepair through neglect of

its banks, constantly threatened by the flooding and silting streams of the region. From Tientsin it is carried southwards into the Hoang-ho, or Yellow River, which now falls into the Gulf of Pechili, but has repeatedly shifted its course, and up to our own time reached the sea three or four degrees farther south, as it may still be found marked on some maps. No less than nine successive beds of it are stated to be traceable on the plains. "China's Sorrow" is a by-name for this mighty stream that by its sudden inundations has so often spread ruin and misery. Its discharge is about equal to that of the Nile, and it has been calculated that 24,000 years would suffice to fill up the Gulf, of Pechili with the turbid burden it brings down from the barren mountains on its upper course.

Road cut through the "Loess" Formation, North China

The names "Yellow River" and "Yellow Sea" are naturally suggested by the sediment of a yellow earth covering most of the Hoang-ho basin, known as the loess formation, and celebrated for its richness, so that it can be used as manure for poorer lands. Water and soil are tinged with the same colour; roads, houses, and even plants are powdered by yellow dust. In this deep soft alluvium, water has eaten out the most extraordinary gorges, precipices, and excavations, like those among the Rocky Mountains; and by patient labour the people have shaped the cañons into narrow roads deep sunk between precipitous yellow walls, through which one may travel for days in the bowels of the earth. The loess, such a characteristic feature of China as no doubt to have suggested its imperial colour, seems to be the dust of the northern deserts, piled up, hundreds of feet deep, in course of ages by the winds that go on spreading this layer of distant soil to be washed down to the coast.

Tracing the present course of the Hoang-ho backwards, we find it marked by two enormous bends that make its length some 2500 miles, doubling what

would be its straight course. In its lowest reach it flows northward by the mountainous province of Shantung, forming a bold promontory towards Korea. The capital of this province is Tsinan, a well-built city of some 200,000 people, a considerable proportion of them Mohammedans and Catholic converts; but the largest town appears to be Wei (250,000), and the most famous is Kinfao, the birthplace of Confucius, where some score thousand people claim to be his descendants. Here are his tomb and one of the noblest temples raised to his memory, containing relics and ornaments that make it a museum of Chinese Art. Another sacred place of the province is Taingan-fu, "City of Temples",

to which pilgrims come by tens of thousands from all over China. Che-fu, on the north coast, is an important seaport, frequented by foreigners as a health resort. To the east of this comes Wei-hai-wei, a harbour acquired by the British; and on a deep inlet of the south side Kiao-chow, that taken by the Germans, who have pushed a railway inland from their lively young town, Tsingtau. Across the gulf, at the point of the Liaotung projection of Manchuria, Shantung is faced by Port Arthur, the ex-Russian station, now in Japanese occupation.

The next reach of the Hoang-ho is from west to east through the province of Honan. The chief town here is Kaifung-fu, once capital of the empire, as was the city of Honan upon a tributary farther up, among hills crowned by ancient temples.[1] The lowland part of this province was the scene of the great inundation of September, 1887, when, as described by Mr. Meredith Townsend (*Europe and Asia*), over a territory twice as large as Yorkshire every creature was destroyed, a loss variously estimated as from one to seven millions of human lives, besides countless animals. "The river was at its fullest, its speed was at its highest, there was almost certainly a driving wind from the west, a bit of dyke gave way, the rent spread for 1200 yards, and our readers may remember, for

[1] The affix *fu*, meaning a palace or city of the first rank, may henceforth be omitted in these names.

Charles Reade has described it, the rush into Sheffield of the Holmfirth reservoir. Multiply that, if you can, by 2000, add exhaustless renewals of the water from behind—five Danubes pouring from a height for two months on end,—and instead of a long valley with high sides which can be reached, think of a vast open plain, flat as Salisbury Plain, but studded with 3000 villages, all swarming as English villages never swarm, and you may gain a conception of a scene hardly rivalled since the Deluge."

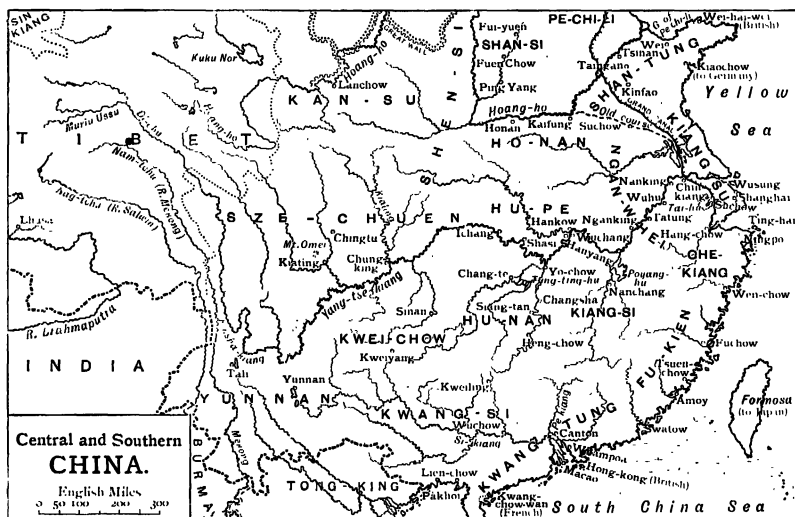
Above its important affluent the Wei-ho, the Hoang-ho has next a sharp turn northwards, coming down from the Great Wall between the provinces Shansi and Shensi, where it is believed that rich coal-fields will make up for the woods stripped from the mountain slopes of the river bed. In Shansi, on the east side, there are several flourishing cities, and others reduced to ruins by the Taiping war, like Ping-yang, which was the national capital more than forty centuries ago. As in other regions of China, the hilltops are often seen crowned with strongholds where the people took refuge during periods of disorder. Si-ngan, the chief town of Shensi, is another of China's many ex-capitals, and still one of its largest cities, the population being perhaps a million. It gives some vague conception of the vastness of this country that such a place should have been almost unknown in Europe till the Chinese court took refuge at it after the capture of Peking by the allies in 1900. Yet here, among still older archæological records, is preserved a monument of rare interest for Christians, a stone with an inscription in Chinese and Syriac attesting the presence of Nestorian missionaries in the eighth century. The population of Shensi is now to a considerable extent Mohammedan, and it was distracted accordingly by their insurrection following that of the Taipings.

Beyond the Great Wall the river makes a curve through the deserts of Mongolia; then, its backward course coming once more from the south, it traverses Kansu, the projecting north-eastern corner of China proper, where, during and after the Taiping revolt, similar devastation was wrought by the Moslem Dungan insurgents. The most important place in this province is Lanchew, whose strong fortifications kept the rebels at bay, and now protect a cannon foundry and other industries carried on by help of coal-mines in the district. Some quarter of the inhabitants are Mohammedans; but in the western part of the province is the great Buddhist monastery at Kumbum, inhabited by thousands of lamas, with the trading town of Lusar at hand, where a brisk business goes on in praying-wheels and other machinery of Buddhist devotion. Beyond Kansu, once more the Hoang-ho appears in Tartary, where it winds through the great central boss of mountains, taking its rise at a height of nearly 15,000 feet, with two large lakes as its reservoirs. Not far off, on a southern slope of the Tibetan plateau, are the sources that feed the Yangtse-kiang and other great rivers watering India and Indo-China.

The Yangtse-kiang is by far the chief river in China, and, in view of its rich and populous basin, one of the most important streams in the world. In China it is *the* river, and has the *sobriquet* of the "Blue River", though its stream is as turbid as the Hoang-ho's, the distinction appearing to come from a fanciful idea of the Yellow River as the Son of Earth, and the Blue River of Heaven. It has a length of over 3000 miles, for a great part of which it flows through the centre of the kingdom, with its affluents bringing life to half the population. Nearly 1000 miles above its mouth, its volume has been calculated as 244 times that

of the Thames at London. While still an infant, sporting among the heights of Tibet, it is as broad as the Thames. Marco Polo found its channel thronged with more vessels and richer cargoes, in his estimation, than on all the rivers of Christendom. Its course has a peculiar interest for us, this central basin having hitherto been regarded as specially the sphere of British commerce, on which now, from one side and the other, Russia and France threaten to intrude.

Under the descriptive name Muriu-ussu, "winding water", the Yangtse at first flows east along the ridge separating it from the Hoang-ho, then turns south as if making for Indian waters like the other great drains of Tibet. Lower down

Central and Southern CHINA.

it is known as the "River of Golden Sand" and as the "White Water". Unable to pierce the Yunnan mountains, it is deflected to the east, then, after a series of bold bends, strikes north, then east again, and in this general direction meanders towards the coast. Soon after taking its final turn eastward it appears like an arm of the sea where joined from the north by the Min or Wen, that, though only some 300 leagues long, is regarded by patriotic Chinese geographers as the main stream, its course lying wholly within China proper.

To the west of the Min valley rises abruptly from a plain the sacred Mount Omei (11,000 feet), visited by pilgrims, from all over the empire, to its Buddhist shrines. Beside the river has been hewn upon the whole face of a porphyry cliff a gigantic statue of Buddha, between 300 and 400 feet high, the largest such monument known, formerly coloured and stuccoed, now mantled by luxuriant verdure, half-hiding other sculptures on the rocks which testify to a faith still older than Buddhism. Crumbling stairways and zigzag paths lead up the long ascent, with temples for stations, garrisoned by an army of greedy priests. The highest temple stands by the edge of a sheer precipice a mile or so deep, said to be the most stupendous in the world. The view hence dwarfs all our Rigi prospects. On the east the city of Kiating and the cultivated valley lie

10,000 feet below; westward, over a sea of mountains inhabited by wild beasts and wild men, the eye may catch the glacier crests of Tibet, 100 miles away. A common phenomenon here is the brilliantly-coloured, circular halo, in the centre of which the observer sees the magnified reflection of his own figure, an optical effect produced on other misty mountains, on our own Ben Nevis as well as on the Brocken. When this "Glory of Buddha" rewards weary pilgrims, in their ecstasy they sometimes rush to hurl themselves over the precipice, which has been fenced off to check such suicides.

The Min joins the Yangtse in Szechuen, which, almost equal to France in

Photo. J. Thomson

Mountain Scene. Szechuen

size, is the largest, and, in spite of its cloudy skies, the richest of the Chinese provinces. Catholic missionaries have been at work here for two centuries, now counting their converts at some 100,000. On the west side the province merges in Tibet by grand snow mountains which still shelter aboriginal communities more or less independent. On the east side Szechuen, though a picturesquely-highland country, is thickly populated by industrious Chinese, who were lucky enough to be out of the way of the Taiping war that so long desolated the lower part of the Yangtse basin. The capital is Ching-tu on the Min, renowned for its refinement and handsome buildings; "the Paris of China" it has been fondly named by French exiles. This distinction it owes to the ancient city having been destroyed by exterminating conquerors, so that a new one came to be laid out in broad streets, the walls, 12 miles round, containing a population growing on to a million. It is also the Chinese Sheffield, through its iron industry, and has been compared to Milan for its view on the crests of the Szechuen Switzerland. When the river is high, junks can come up to its port, 2000 miles from the sea.

Suchow, at the conflence of the Min with the Yangtse, is an important mart for a district rich in coal, salt, and petroleum. Farther down the main stream, at the confluence of the Kialing, stands the great commercial depôt Chung-king, which, grouped with two adjacent towns on the opposite banks, has a population as large as that of Ching-tu. This commercial metropolis of the West, though 1500 miles from the sea, is one of the open treaty ports; and to it in 1898 Mr. Archibald Little had the credit of bringing the first steamboat up the rapids of the Yangtse-kiang, as can best be done in summer, when its shallows are covered to the depth of 100 feet by a chocolate-coloured flood, against which, the winds failing at this season, sails can make no headway.

For a great part of its course the Yangtse runs in a deep narrow bed, hardly broader than the stream; but it is below Chung-king that its celebrated succession of gorges oppose such difficulties to navigation. The country here is a sandstone plateau, crossed by ridges of limestone, forming a wildly rugged landscape, like that of Saxon Switzerland on a larger scale, traversed by stony paths and stairs. Through these heights the river twists and tacks its way, often sunk beneath lofty walls, from the top of which its huge stream appears a mere torrent far below. Sometimes the walls are clean cut, like a cañon of the Rocky Mountains; or again, softer stone has disintegrated into ruins that threaten to choke up the channel. Above, the worn and weathered edges might be taken for the battlements of some Titanic stronghold; farther down, within reach of the annual floods, more elaborate effects are produced by erosion. "We passed rocks fluted like organ-pipes, with the stones that had done the fluting still held captive in them; rocks fretted almost into lace-work by the action of the water; rocks weathered red and rocks weathered gray; and one day we saw a black mass, which we were told was harder than steel, yet it was gnarled and gnawed in rings." So writes Mrs. Little, who, as well as her husband, gives us an account of these gorges. As it crooks between terraces, bluffs, and peaks, the bed of the river is broken by rapids, whirlpools, islets, reefs, sand-banks, and boulders, that here and there seem almost impassable obstacles. But the enduring Chinese have for ages travelled this water-way in junks, driven against the current in the smoother reaches by their huge square sails, and where the wind will not help, hauled up by gangs of trackers, who at the worst passages are roused to exertion through drumming, yelling, and belabouring, led on sometimes by a buffoon dancing and singing in front by way of encouragement. The crew meanwhile are not idle, holding themselves ready with hooks and poles to push off from some dangerous point, naked swimmers springing in and out of the water to shove and drag or set free the entangled bamboo tow-line. The distance through the gorges between Chung-king and Ichang is at least 500 miles, double a direct line from one place to the other, and the voyage upwards takes three weeks or so, when all goes well in the winter season of low water. Also in the swifter descent of such a navigation many junks are wrecked, and the Chinese cannot but see the advantage of steam here, long resisted by the authorities on excuse that it would throw an army of trackers out of work. At the most dangerous passages, life-boats for help and rescue are maintained by the Government.

At the lower end of the rapids is Ichang, one of the treaty ports, up to which steamers have for some time plied among the thousands of junks that lie moored in rows by its bank. A little below comes Shasi, "market on the sand", where, after the war, the Japanese acquired the right to set up factories that aim at

competition with the looms of Manchester and Bombay, and should bring fresh prosperity to the long dilapidated quay fronting this town. Some way above Ichang the river entered Hupe. The chief place of this province is Hankow, 400 miles lower down, where tall chimney-stacks are seen belching smoke over the curly oriental roofs, and vessels of considerable size come to lie at the quays. Wuchang, on the opposite bank, is the official capital; and another large city, Hanyang, stands on the peninsula formed here by the confluence of the Han. This group of cities, occupying much the same relative position as New York, Brooklyn, and New Jersey, was said a century ago to have contained millions of people, according to some travellers more than the London of our day; and the population, though reduced by the Taiping troubles, may grow to be the largest in China, one to two millions. The affix *Kow*, equal to our "Aber" or "Inver", implies that Hankow stands at the mouth of the Han river, by which the Yangtse basin communicates with that of the Hoang. This makes it a great inland emporium, centre of the tea trade, and home of a foreign community much increased in the spring months, the tea market season, while it is also a centre of manufacturing industry, in which Japanese settlers play an active part. It is now connected with Peking by a railway journey of 36 hours; and this enterprise should be extended as a great trunk line to Canton. Above Hankow there is more or less irregular steam navigation up to Ichang; while below, large steamers of different lines ply to and from Hong-kong.

In this neighbourhood are several lakes, formed by overflowing of the Yangtse, that, no longer pent between rocky banks, in the rainy season spreads out like an inland sea, often causing dangerous floods. The largest of such lakes is Tung-ting (over 50 miles long), which, almost touched by the river in its southern bend above Hankow, lies at the northern edge of Hunan, a province whose people have the name of being the most soldierly of the Chinese, and the most fierce against foreigners. The capital of Hunan is Chang-sha, on the Siang-kiang, flowing from the southern provinces into Lake Tung-ting; by which river also stands Siang-tan, with a special trade in drugs and nostrums of Chinese quackery. This appears to have been one of the largest cities in the empire, the population now loosely given as a million. Along with rich coal mines Hunan has other populous cities, but in such a summary sketch of so huge a country we must pass over many names which else would demand mention.

To the east of Hunan lies the province of Kiangsi, traversed by the Kan, that runs north into the Poyang lake, another great expansion of the Yangtse. On this tributary stands the capital, Nan-chang, and on the main river, near the embouchure of the lake, Kiu-kiang is a port with a European community. The largest towns appear to be Hukow and Kingtehchen, the latter celebrated for pottery, besides which Kiangsi supplies some of the finest teas.

These two provinces are south of the Yangtse's course, which has now escaped from its mountain walls to roll over a great alluvial plain. Instead of romantic gorges the voyager has around him a flat monotonous landscape broken here and there by eminences that ages ago were rocky islets in the sea, and still form islands of refuge when for half the year the fields are drowned by the great river's annual high tide, or stand out in its channel like Titanic stepping-stones. Much of the land is actually below the level of the stream, which even at its ebb spreads into wandering branches, now flowing strongly through embanked channels, now opening into shallow lakes, now bordered by dreary marshes, alive

with wild-fowl and half-covered with forests of gigantic reeds, which are the chief building material of this amphibious country, all cut up by the creeks and canals that take the place of roads here. It has often been remarked how China, so old as a nation, is on the sea side a young land geologically, still slowly being built up from the edge of its western mountains towards the always advancing coast-line.

The river now traverses the province of Nganwhei, whose capital is Ngan-king, and lower down are the treaty ports Tatung and Wuhu. This district is noted for the manufacture of paper from bark. The name Ngan-king must not be confounded with the more celebrated Nanking, chief town of the next province,

Photo, Valentine

A Bamboo Raft

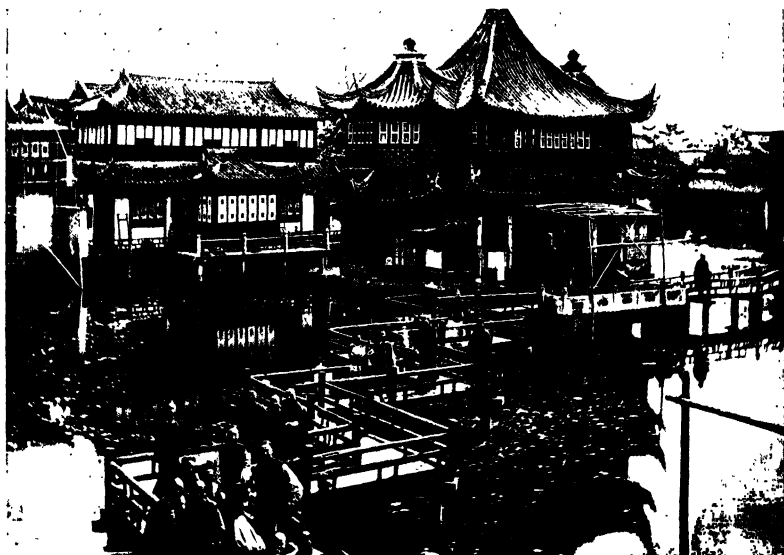
Kiangsu, and once capital of all China, when it appears to have been the largest city in the world. Half a century ago it came to ruin as head-quarters of the Taiping rebels. Within its *enceinte* of over 20 miles, a remnant of the inhabitants were left huddled in filthy lanes amid desolate open spaces and the scars and litter of war. The world-famed porcelain tower was then destroyed, as was the imposing tomb of a Ming emperor, some way outside the city, where still stands an avenue of stone giants and monsters as at that other imperial burial-place near Peking. But Nanking now recovers its old prosperity; and here in 1910 has been held the first Chinese Exhibition.

[1] This insurrection against the Manchurian dynasty broke out in 1850, headed by Hung-sew-Chuen, a native enthusiast who began life as a village schoolmaster, and, coming into contact with Christian teaching, adapted from it a new religion that was to regenerate China under a reign of "Taiping" or universal peace, with himself as "Heavenly King". At first Hung seems to have preached and enforced a rigid morality, but success turned his head, and his character did not stand the test of power, though to the end he exercised an extraordinary influence on those around him. After establishing his rule at Nanking, in the seclusion of a royal seraglio he gave himself up to visionary self-indulgent fanaticism, which in his latter days appears to have amounted to insanity. But the "Wangs" or princes appointed by him, kept China in turmoil for years, at one time pushing their advances nearly to Peking. Whatever may have been their original aim, like the Anabaptists of Munster and other enthusiastic revolutionaries, Hung's followers inaugurated their golden age by cruelly ravaging a great part of the country; and as the imperialists opposing them

Other great cities of this province, half-ruined by the insurgents, are Chinkiang and Su-chow. The former bids fair to become one of the chief inland ports, standing where the Grand Canal connects the Yangtse with the Hoang-ho through a labyrinth of lakes and water-courses. To the south, the canal goes on to the Tai-hu Lake, a large sheet of water near which is Su-chow, famous of old among Chinese cities for its vast extent and huge population, 60 miles in circuit, reported Marco Polo, with 6000 stone bridges, that have likened it to Venice. It has also gained a high reputation for refinement and beauty. This place, with some half a million left in its dwindled bounds, is still a seat of considerable industry. By it now goes a railway from Nanking to Shanghai.

Through Kiangsu the Yangtse filters to the sea. Southwards the Tai-hu Lake half-cuts off the swampy tongue where stands Shanghai on an affluent of the main estuary, here 20 miles bread. This has for half a century been the most important place in the province and one of the chief ports of Asia, with a population of perhaps 700,000, Over 12,000 foreigners live here, some third of the whole number in China, and one effect of such contact with the West is that several Chinese newspapers and other periodicals are published at Shanghai. Its trade it owes both to European and Chinese enterprise; but there is here, as elsewhere, a great contrast between the filthy Chinese city, crowded within its crumbling walls, and the self-governed European concessions, with wide, well-built streets, shady avenues, gas, electric light, water-supply, and tramways; advantages beginning to be so much appreciated by the Chinese that they flock into the European quarter. This is divided into the English, the American, and the French concessions, all self-governing, though the two Anglo-Saxon nations unite to "run" municipal institutions; then there is a "Mixed Court" for dealing with the Chinese, and policemen of various nations work more or less in unison. A fine show of palatial warehouses, banks, and public offices borders the "Bund", the quay in front of which is the starting-place of a great trade with the interior. Through the supineness of the native officials the river has been silting up at its mouth, where the exterior port of Wusung is connected with the city by a 10-mile railway, the first made in China, which was soon pulled up by the prejudiced officials and for years stood idle, but has been relaid. A telegraph line joins Shanghai to Peking. The environs are not very pleasant, but one broad drive leads out to the "Bubbling Well" that is the social rendezvous; and with cricket, polo, paper-chases, races, hunting over the flat country, and shooting in the distant hills, the exiles of Shanghai contrive to bear up against their trying climate and the too sumptuous hospitality for which they have a name.

showed the same ferocity, whole districts became depopulated. For long the cumbrous military system of the Chinese Government made little head against the insurgents, who had a good deal of sympathy from the foreign community, especially from the missionaries, till Hung showed his heterodoxy by setting up for a prophet as well as a reformer. It is still a moot point whether he would not have won the throne, if the two parties had been left to fight it out, and whether this might not have been the best thing for China. But when the Taipings proved unable to go beyond injuring the country and crippling trade, the feeling of foreigners turned against them, the more so when their advance threatened Shanghai. A small force, disciplined by foreign officers, came to be employed by the imperial authorities under the high-sounding title of the "Ever-victorious Army". Though by no means ever-victorious, this body played an important part in the struggle, especially when, by permission of our Government, it was led by Gordon, a captain of Engineers, who now for the first time had a chance to show his qualities. Town after town was taken from the rebels, till they were at length shut up in Nanking. In 1865 the city was carried by assault. The "Heavenly King" is understood to have committed suicide; his son and other leaders were taken and executed; and though some of the rebels escaped, to carry on a desultory resistance among the mountains, or to join the Mohammedan insurgents, the Taiping power was at an end, after causing frightful sufferings not only through massacres on each side, but through the devastation of the country, and especially through neglect of the river embankments that keep it from becoming a watery wilderness.

South of the Yangtse estuary, the Hang-chow Bay deeply indents the province of Chekiang, its coast bordered by the rocky Chusan Archipelago. At the head of the bay, where the Great Canal comes in, lies Hang-choo, declared by Marco Polo the largest city then in the world, with a circumference of 100 miles and 1,600,000 houses. It is still a dozen miles round, environed for miles by the ruins of its ancient magnificence amid the beautiful lake scenery which has made it a paradise in Chinese eyes. Its main industry is silk-weaving, which employs a large population, said to have been reduced during the Taiping troubles from two millions to a quarter of that number. Near the mouth of the

Chinese Tea House and Bridge, Shanghai. From a photograph

bay is Ningpo, also a famous old city, with fine surroundings and a good climate, but the trade it gained through its position at a confluence of waterways has been in part drawn away by Shanghai. Fishing is a great industry of the adjacent coast and among the Chusan islands, the capital of which is Tinghai on Great Chusan. Wen-chow, on a river of southern Chekiang, is one of the treaty ports.

Southwards, the next sea-board province is Fukien, with its capital Fu-chow, a city of 600,000 people, having a port on the estuary of the river Min, where the Chinese, with the help of French engineers, established their chief naval arsenal. Tea is a main product, in this region being the Bohea Mountains that have given us a familiar name. Tsuen-chow, farther south, was at one time the most important port; but its harbour has become choked up, and its trade has gone to the Bay of Amoy, opposite the once Chinese island of Formosa. Amoy itself stands on an island; and the foreign settlement on an islet apart. Another rising port is Swatow, farther down. Beyond Hong-kong, on the neck of a southern peninsula, stands the French port Kwang-chow-wan.

Thus we come round to the south side of China, drained by the River Si-kiang, a region differing much from the north, in its warmer climate, in its mixed population, in their language and customs, so that if the empire fell to pieces this might easily form itself into a separate nationality. China is by no means such a homogeneous country as we are apt to imagine, its distrust and dislike to foreigners being shown in a less degree between different provinces or even villages. The people of Peking call the Cantonese "barbarians", and the latter retaliate with "Tartars", which comes to much the same thing. "Tall, strong, slow" for the northerners, and "small, short, sharp" for the southerners, are characterizing epithets. The southern Chinese are more skilful workmen as well as more enterprising traders; and it is from this corner of the coast chiefly that come the emigrants to America, Australia, and the Malay ports that lie close to their native homes.

The largest of the islands at the mouth of the Si-kiang Delta is Hong-kong, a Gibraltar-like mass of rugged rock 30 miles round. This, since 1841 the eastern outpost of the British empire, which has since acquired a strip of land about Kowloon on the main coast, is a Crown Colony, with a governor and council. The city we have built here, Victoria, 10,000 miles from London, is the finest in the East for situation, rising in terraces of white houses, mixed with churches, factories, barracks, and batteries, upon a steep hill face, at night sparkling with thousands of lights that above seem to mingle with the stars. From the granite buildings of the lower city a steam tramway takes people up to lofty villas among wooded knolls, where in summer they can escape the hot, damp air of the business quarter below. The island contains beautiful green nooks set in grand rock scenery, such as the "Happy Valley" that has been turned into a race-course rather incongruously overlooked by cemeteries; and through the ravines gush the streams of "Sweet Waters" which give Hong-kong its name. The highest point is the Victoria Peak, which commands a magnificent prospect, when not spoilt by rain or mist, over the city, the harbour, and the hilly mainland, fringed by a new town of docks and warehouses. Mr. Henry Norman (*Far East*) doubts if there can be a more remarkable view in the world than this over "10 square miles of roadstead. At night, it is as if you had mounted above the stars and were looking down upon them, for the riding-lights of the ships seem as if suspended in an infinite gulf of darkness, while every now and then the white beam of an electric search-light flashes like the track of a meteor across a midnight sky. By day the city is spread out nearly 2000 feet directly below you, and only the ships' decks and their fore-shortened masts are visible, while the whole surface of the harbour is traversed continually in all directions by fast steam launches, making a net-work of tracks like lace-work upon it, as water-spiders skim over a pool in summer-time."

There are more than 400,000 people on the island, a sprinkling of them Europeans, but mostly Chinese, who appreciate the benefits of British rule better than they are appreciated as neighbours, when, for instance, bubonic plague finds congenial soil in their insanitary dwellings. Parsees seem to thrive best among the motley throng of Hindoos, Burmese, Malays, and Polynesians attracted to Hong-kong. The same diversity appears in the shipping to which its harbour gives refuge from the typhoons of these seas. European steamers and men-of-war lie among top-heavy Chinese junks, with eyes painted on their bows, and square palm-leaf sails like Venetian blinds, all mingled in a throng of smaller

sampans, proas, and other Eastern craft. Navigation had more perils than one hereabouts, when the coast swarmed with pirates, against whom the Chinese Government was powerless, and who are not altogether extinct, though it is seldom they venture to attack European vessels. The name of Ladrones (Robber Islands), given to another group in this gulf, is so far unjust that at one time almost all the rocky islands off the Chinese sea-board made haunts of pirates. In these lawless seas there were cases of steamers being seized by their passengers, so that it was found necessary to lock all Chinese under hatches for the voyage, and to keep loaded arms at hand for the use of the few Europeans

Hong-kong Harbour

Photo N. P. Edwards

on board in case of any rising. The land population of Hong-kong, too, has earned a bad name for crime; and the Government finds much ado in keeping order among the growing native population in whose eyes our punishments appear despicably merciful.

On the opposite side of the estuary is the peninsula of Macao, where stands a Portuguese town, the oldest place of trade with China, now inhabited chiefly by the half-castes called Portuguese, and having gambling tables for its main industry, which, till a quarter of a century ago, was that of exporting slaves under the name of coolies. It also turns a dishonest penny by selling, and changing, its postage-stamps, so as to levy tax on philatelists; then its breezy shores make a health resort for the perspiring merchants of Hong-kong. These two settlements, Hong-kong in its stately prosperity, Macao in its mean decay, well illustrate the change that has come over the world since Camoens wrote part of his Lusiad here, and Francis Xavier died on an adjacent island.

From Hong-kong and Macao steamers ply up the delta formed by three

streams, the Si-kiang "river of the west", Pe-kiang "river of the north", and Tung-kiang, "river of the east", a labyrinth of shifting streams, back-waters, and canals, where large vessels cannot ascend beyond Whampoa, 8 miles below Canton. The main channel, known to the Chinese as the Pearl River, is called by us the Canton River, on which, 80 miles from the mouth, stands the largest city of China, indeed of Asia, its real name Kwang-chow, but Europeans have corrupted Kwang-tung, the province of which it is capital, into Canton. Though Canton was the first Chinese port opened to trade, our dealings with it have not tended to produce favour for Western civilization, and this home of a million or so inhabitants remains one of the most Chinese among Chinese cities, "a colossal human ant-hill, an endless labyrinth of streets a dozen feet wide and a score high, crowded from daylight to dark with a double stream of men and women". However picturesque to the eye such a scene may be, it is offensive to another sense in a manner that breeds destructive pestilence. The city has a bad reputation, too, for crime and turbulence, and foreigners will not unadvisedly trust themselves in its slums, among a scowling mob only too familiar with the warnings of its blood-stained execution-ground and magisterial chambers of horrors. Each street is barricaded at night, so as to form an enclosed quarter within the thick outer wall, the whole city being also divided into two parts by a wall running through it, and the Tartar citadel forming a separate *enceinte*. The European quarter stands apart on an island; beyond which another island makes a separate town to the south. The most striking feature of Canton is its river, covered for miles by a floating population of some quarter of a million, inhabiting tens of thousands of craft of all sorts, from gaily furnished house-boats with gardened roofs down to little "slipper" boats that look like big shoes. This water-city has its streets, its moored shops, its inns, and its trades all carried on by water as on land, and by both sexes, for the Canton boat-girls are somewhat notorious as strapping hussies, very unlike their crippled and secluded sisters on shore. Canton now sees the novel sight of a railway.

To the south of Kwang-tung a narrow strait cuts off the mountainous island of Hainan, which is little known, and its interior population seems to be of semi-independent aborigines edged by Chinese settlers on the coast. To the north the Pe-kiang comes down from the mountains, shutting in the Yangtse basin towards the provinces of which it makes a road, so far as its gorges are navigable. From the west flows the Si-kiang, the great water-way of southern China, navigable for 800 or 900 miles, towards which the French have been pushing a railway from their Tonking settlements. It waters the province of Kwangsi, not so thickly populated as its eastern neighbour, having for its capital Kwei-ling; but its largest town is Wu-chow (200,000) a great emporium at the confluence of the Si-kiang and the Kwei-ling River, which latter, by a canal, communicates with the Yangtse basin. To the north Kwangsi is separated from Szechuen by the province of Kwei-chow, with its capital Kwei-yang, from which the Wu-kiang flows down into the Yangtse.

The head-waters of the Si-kiang are in the south-western province of Yunnan, whose lakes and mountain gorges are also drained by tributaries of the Yangtse and of the great rivers of Indo-China. Its capital is the lofty city of the same name. This "Chinese Switzerland", as it has been called, is for the most part a thinly-peopled highland region, very loosely related to China, and having a strong Mohammedan element in the population. Here was the focus of the

A STREET IN CANTON

"On our way homewards we pass through Physic Street, or Tsiang-han-Kiai [the one shown on the plate]. Here nearly all the shops are uniform in size, a brick party-wall dividing each building from its neighbour. All have one front apartment open to the street, with a granite or brick counter for the display of their wares. A granite base also supports the tall upright sign-board, the indispensable characteristic of every shop in China. Opposite the sign-board stands a small altar or shrine, dedicated to the god who presides over the tradesman and his craft. . . . It is by no means pleasant to be caught in one of these narrow streets during a shower, as the water pours down in torrents from the roofs and floods the pavement, until it subsides through the soil beneath. The broadest streets are narrow, and shaded above in some places with screens of matting to keep out the sun."—From *Through China with a Camera*, by JOHN THOMSON, F.R.G.S.

J. Thomson

A STREET IN CANTON, CHINA

Moslem insurrection that for nearly twenty years kept this corner of China in commotion, while the Taipings ravaged the central provinces. Not till 1893, the rebel capital Tali-fu, on the great mountain lake Tali, was ruined by the massacre of half its inhabitants; but it is bound to rise again by its position on what must become a great road of trade. Bordering as it does French and English possessions in Indo-China, both these rivals have covetous regard for the commerce that might be opened up through the valleys of Yunnan; and its hills, though often bare even of soil, or giving thin pasture to sheep, are remarkably rich in

Photo. J. Thomson

Curious Bridge at Chao Chow-fu, Kwang-tung Province

minerals, precious stones, and forests of timber, while on the table-lands opium is largely grown. Had Yunnan succeeded in dropping off from the rotten Chinese empire, under some form of good government it might soon have developed the prosperity checked by that long civil war. The official capital is Yunnan-seng on an eastern lake. The small western town of Momein in the Irrawady basin may rise to importance as gate of a proposed route between Burma and south-western China; but France has got the start of Britain in a railway now pushed from its Tongking colony to Yunnan. All this corner contains many of the Miaotse aborigines, who here, as elsewhere, cluster in the mountain recesses, while the Chinese fix themselves rather on the fertile lowlands.

The north-western mountains of Yunnan merge into the Himalayas, beyond which lies mysterious Tibet. But before going on to the vast dependencies of China proper, let us see what are the natural resources which run much to waste through ignorance and ill-government.

PRODUCTIONS

China is covered with a variety of vegetation, culture being pushed often almost to the tops of the mountains, where every patch of soil will be turned to account in what seem inaccessible nooks, while the watery plains below lend themselves readily to abundant harvests. The industrious peasant, working with rude instruments and with minute labour, like that of a market gardener rather than a farmer, gets everything he can from the ground, which he enriches by the use of manure, collected and applied in a manner to disgust the more fastidious foreigner. A dunghill is to the Chinaman a thing of beauty. Water he leads to his fields by canals, aqueducts, ditches, troughs, and other conduits, raising it, if necessary, by the wheels and buckets common in Oriental lands; and the hills are laid out in terraces to be irrigated by their tamed streams. The river plains are like to have only too much water; their fields can be banked into sloughs where rice flourishes upon drowning. On the plains of the centre and south this is the chief crop and the staple food, the dry rice variety also being grown on the hills. In the north the people depend more on wheat, barley, maize, and other hardy grains. A great green plain of rice is not so picturesque as the fields of a highland country, chequered by crops of corn, sugar-canes, clover, poppies, beans, cabbages, and other vegetables, the houses often surrounded by clumps of fruit-trees, the streams lined by willows and bamboos, beneath which blue forget-me-nots touch the heart of a European exile.

Brick tea Carriers, Western China

Tea is the product by which China is most familiarly known in Europe, the Chinese name having changed its pronunciation since the word came to us.

> "Thou, great Anna, whom three realms obey,
> Dost sometimes counsel take, and sometimes *tea*!"

This, chiefly grown in small patches by the peasantry of the central and southern provinces, is a national drink all over China, prepared by simply pouring boiling water over a pinch of the leaves. Our economical way of infusing is unknown to the Chinese, though they seem to have no nerves to ruin. The plants ought to be carefully set out in rows, well apart, that their glossy leaves and white blossoms may have the full benefit of the sun. When plucked, the leaf is dried in the open air or over charcoal fires, treading with naked feet also being used to press out the moisture. So far as our market is concerned,

the competition of the stronger Indian and Ceylon tea has done much harm to this industry in China, where the growers have themselves too to blame by their neglect of the plant and its preparation, and by adulterating the tea with willow twigs, oak leaves, and other rubbish. Cheaper kinds, steamed and pressed, are moulded into solid bricks, like large cakes of chocolate, in which compact form tea can best be transported into Tibet and Siberia and over Central Asia. Hankow's factories are the chief seat of the brick-tea business. The Russians are good customers to China for the better caravan tea, some qualities of which cost ten times our ordinary price or more, the belief being that a voyage by sea would destroy the delicate flavour, though, in fact, these teas are usually shipped from

Poppy Field in Bloom. From a photograph by Mrs. Bishop

the south to Tientsin, to be thence despatched by caravan and rail over the continent; while a good deal now goes all the way by sea to Odessa.

The place of tea was to some extent taken by opium, once grown freely all over the empire, even when nominally forbidden; but of late years the imperial Government set on foot serious measures towards restricting, and eventually ending, its cultivation. Most of the opium used in China has been home grown, the finest quality only coming from India. Apart from the question of its effects, this crop is an admirable one, the dark-green plants, 3 or 4 feet high, displaying on ridges their lines of vari-coloured flowers, white the most common. The juice is collected in spring by making a cut in the stem, the exudation from which is scraped off, the plant being then pulled up for the pigs. Oil is pressed from the seeds, and the stalk is burned to make a dye; and when all these products have been secured, the ground lies free for a summer crop of maize, beans, or cotton. Tobacco also is much grown in China, and is said to be good and cheap, though we have not heard of it in foreign markets.

Long before tea came into use in Europe, China was famed for its silk, cultivated in most parts, whole woods of mulberry-trees sometimes figuring in a landscape. In the north, where the mulberry does not flourish, the silk-worms can be fed on the leaves of a kind of oak. Finely woven, dyed, and embroidered, it makes the clothing of the rich, and to some extent of all classes. Cotton, more commonly worn, and used for wadding out winter garments, is grown chiefly in the east, and has to be imported into the mountainous western districts. In the supply of manufactured cotton English trade has been active, but the coarser and more durable fabrics of native looms still hold their own, supplied in part by imported cotton yarn; and Lancashire has to contend not only with the competition of Bombay, but with enterprising Japanese manufacturers who now set up excellent machinery in the heart of China. Wool is not much used unless about the pastoral border lands. Instead of linen, a fine cloth is sometimes woven out of grass. Silk, of course, is the fabric most exported, which in old days enriched our merchants; but the Chinese are now learning to handle their own goods for themselves.

Bees, as well as silk-worms, are made much at home among this industrious people. A curious product of Szechuen is that of the wax insect, which shows a peculiarity in developing its industry upon a tree where it is not native. These insects grow upon an evergreen high up in the mountains, from which, at a stage when they appear like pods full of flour, they are taken to be made up in paper packets and carried rapidly by porters travelling across the hills by night, as the heat of the sun would bring them on too fast. Hundreds of miles from their place of birth they are attached to ash-trees, on whose leaves they secrete what looks like a coat of snow. When this is a quarter of an inch thick, it is removed, to be placed in hot water and skimmed off as valuable wax, used for a hardening coat to the tallow candles that, in paper lanterns, have hitherto played such a part in lighting up China. Imported kerosene oil seems now to be taking the place of this wax.

A valuable plant is the tung or "varnish-tree", from the nuts of which is expressed an oil much used for coating boats, furniture, &c. The pods of the soap-tree serve for soap. The tallow-tree, with its quivering foliage and gay-scented blossom, is as common as it is beautiful. The camphor laurel is native here. Evergreens, such as the cypress and yew, and ornamental shrubs are much seen. The trees most grown in the cultivated districts are those that bear some useful crop, and forests of heavy timber are rather to be looked for among the mountains. A frequent feature of the landscape of Central China is its mixture of trees familiar to northern climes with those of the tropics, oaks with palms, and willows with the bamboo that is here turned to so many purposes. There are woods of walnuts and chestnuts. Apples, pears, peaches, oranges, grapes, cherries, and apricots flourish, as well as bananas, loquats, and other tropical specialties. Some travellers have declared the finest fruit in the world to be the pumalow of South China, though it hardly bears out this reputation as it sometimes appears in our markets under the name of shaddock or "the forbidden fruit". Others have extolled the lichee—known to us only in its dry form,—when fresh, a fruit suggesting both the grape and the cherry. The roots of ginseng and rhubarb are much esteemed as medicine. Whole tracts of land appear like one great garden of flowers and vegetables.

The Chinese are clever artisans in minute work with ivory, jade, tortoise-

shell, mother-of-pearl, and such like. Their skill in dealing with metals is not so marked, unless in bells and gongs. They have learned to imitate European workmen in making clocks and watches, and in the modelling and chasing of bronze. Long before Europe, China learned to make paper of various materials, on which people write, or rather paint, with the well-known Chinese ink, a brush taking the place of a pen. Paper, coloured or oiled, is greatly used for umbrellas, lanterns, windows, and so forth. The Chinese skill in embroidery is almost an art. The porcelain ware, which to us chiefly represents their industry, has fallen off in point of quality, and the finest specimens have been much drawn off to Europe, so that in its native country too, old china has a special value; but enormous quantities of commoner earthenware are manufactured, not only for home use, but for export and for the supply of Central Asia. Lacquer is another kind of workmanship in which the Chinese excel, the name japanning having been unjustly applied to a fashion of ornament which we got originally from China.

The manufacturing industry of China has been checked by a rooted suspicion of machinery, which offends the people in every way, by its being novel, by its saving labour in an over-populated country, and on account of superstitious prejudices. An arsenal, for example, was crippled, because to build a chimney more than 25 feet high was supposed to interfere with the local good luck. These prejudices are slowly giving way, and smoky stacks here and there make their hideous appearance in a Chinese landscape. European craft is now being brought to bear on the rich mines of coal possessed by China. In various parts coal has long been won by rude methods, to be packed into bricks, mingled with dust, clay, or charcoal, which are highly valued as fuel; but there are enormous coal deposits hardly yet scratched by native demand. Salt is a valuable commodity on which the state depends for a considerable revenue, the dearness of it perhaps explaining the Chinese taste for such briny viands as sea-weed. In Szechuen there is a city of three hundred thousand people engaged, as their fathers have been for centuries, in working brine pits by machinery of which the principal material is wood, and buffaloes the motive power, the brine thus drawn up being evaporated by help of the petroleum gas also abundant here. To bore a pit by the methods used may take the lifetime of a generation. An enterprising Chinaman introduced here a steam-pump, which had such effect in draining his neighbours' pits as well as his own that he had to dismount the too-effective machine. The Chinese take a view commending itself to European socialists, that increase of production is not so important as the employment of labour: it should prove a bad business for our manufactures, if they change this policy. The same backwardness is shown in working their mines of iron, copper, lead, and other metals, which abundantly await exploitation, as well as gold and silver gathered from the streams by patient methods which the Chinese practise in other parts of the world. Of the surface of the soil this people is rarely skilled to make the most; but they are still mere children as to its subterranean riches.

Their stock includes oxen and buffaloes, chiefly used for labour, sheep and goats in mountain districts, and everywhere the pig that finds himself so much at home in such a dirty country. Good horses are rare; while ponies, mules, and asses are familiar beasts of burden, as is the camel in the north, and the yak in the mountains of Tibet. Poultry is much kept, especially ducks, and the fowl known to us as Cochin China; there is a rarer breed, said to develop a tail

many feet long. Mean dogs and unpetted cats pick up a livelihood in a country swarming with rats and mice and such small deer. Dangerous wild beasts do not figure much in accounts of this well-tilled land; but cold weather may bring packs of wolves from the mountains, where tigers and tiger-cats linger, sometimes venturing on to the plains laid waste by civil war. The elephant and rhinoceros are not unknown on the southern frontiers. The woods of the west harbour monkeys and snakes. Birds are plentiful, the most beautiful

Photo Underwood and Underwood

Fishing with Cormorants, Grand Canal, China

being the gold and silver pheasants that give sport to exiled Englishmen. The rivers swarm with fish, making no small part of the people's food. Pisciculture has long been practised by the Chinese, who show themselves ingenious fishermen, among other devices training cormorants and otters to use their natural instinct in the service of man. The storing of fish in ice is an example of points on which centuries ago they might have set a copy to nations that are now in a position to school their stagnant state.

CHINESE DEPENDENCIES

TIBET

The countries around China have a more or less loose connection with it, tending to fall away with the decay of its power. Till modern times the kingdoms of Indo-China were its vassals, and still keep the impress of its civilization. Nepaul, on our Himalayan frontier, goes through the form of paying tribute to Peking, though its real dependence is on a more vigorous empire. Tibet, fenced

in by its impregnable mountains, by its religious bigotry, and by its extraordinary distrust of strangers, remains a vassal of the great empire in a degree as difficult to define as it is to trace its rugged boundaries. China at one time seems to have been more powerful over this region, and still speaks of it as a dependency of Szechuen; so an English king once regarded all North America as part of the manor of Greenwich.

The proper Tibetans are a branch of the Mongol stock, specially known as Bodpals, blended on the borders with neighbouring peoples. Their country, the highest inhabited land in the world, is a mass of plateaux with an average height of 10,000 to 12,000 feet, but swelling into waves of much loftier land, enclosed between the Himalayas and the Kuen-lun Mountains of Central Asia, which latter, without the bold peaks of the southern range, are believed to have a greater mean elevation, perhaps 20,000 feet. This giant upland, rough with snow ridges and glacier valleys, pitted with lakes, some of which have shrunk from the size of inland seas, is cradle for the chief waters of southern and eastern Asia, as, on its smaller scale, Dartmoor is for the rivers of Devon. The loftiest "tor" of Tibet may be some 25,000 feet; and the arduous passes by which the country is entered are higher than any European mountain. Its largest sheet of water seems to be the Koko Nor or Blue Lake, in the north-eastern corner, a goal of pilgrimage for devout Buddhists.

Taken at its widest limits Tibet covers some 800,000 square miles, an area far larger than that of any European country but Russia. The whole number of its inhabitants is guessed between 4,000,000 and 8,000,000. Of these the main body seem to be a quasi-civilized people with some marked qualities, good and bad, while the mongrel nomads on the borders, often practically independent of all settled government, have earned many ill words from travellers who had the bad luck to come in contact with them. The eastern districts appear to be more directly under the control of China. The central citadel, as it may be called, of Tibetan life, is ruled by a strange theocracy which submitted to a certain control from Chinese officials resident at Lhasa, the capital. The western part is subject to the Maharajah of Cashmere.

Tibet proper remains almost as mysterious as its mahatmas, through the obstinate policy by which its rulers have excluded foreigners from visits of curiosity. Whether this be the doing of the native princes or of their Chinese advisers is not clear, but it finds some reason in the fate of their neighbours to the south; and it is against England that such jealousy mainly operated in closing the Himalaya passes to an intercourse which, there is example for fearing, might lead to conquest. No admission to Tibet, even on business, was the rule, till the British mission of 1904 made a breach in its seclusion by force of arms. A few daring travellers, at the risk of their lives, have taken snap-shots at the outlines of the country. Others have failed to penetrate its barriers or to come back with their report. Before the development of this extreme suspicion, indeed, Catholic missionaries were able to make their way into the interior, which behind its veil of cloudy mountains we long saw with their eyes, more open as they were to theological than to geographical considerations.

What struck them, and Europe through them, as the most marked feature of Tibetan life was the extraordinary religious system enthroned here. It appears that among the less civilized tribes what little religion there is belongs to a low, indigenous type more or less feebly coloured by the dominant faith; but the bulk

of the people have adopted Buddhism in a form that would hardly be recognized by Buddha. So far as we can catch the teachings of that founder, he dwelt on a high-strained morality, on a noble contempt for the fleeting shows of mortal life, and on the hope of final absorption, by atonement through repeated incarnations, into the state of blessedness called Nirvana, where the burden of life will be lost in a passionless peace which to our minds does not differ from extinction. So dazzling is the halo round a cloudy figure adored by one-third of the human race that scholars wrangle as to whether or not his doctrine implies atheism. This much is certain, that a doctrine with such power to move the human heart has undergone various corruptions in the hands of its priestly interpreters. In Tibet, and, through Tibet, in Tartary, China, and Japan, it has taken a development which resembles that of the Roman Catholic Christianity as compared with Protestantism. Its priests, with their shaven heads, their vestments, their chants, their prostrations and bell ringings before an altar, their censer-swinging acolytes, so strangely recall the rites of Rome that early missionaries, in their scandalized astonishment, were fain to explain this on the theory of the devil aping the true Church. Fasting, confession, pilgrimages, rosaries, holy water are all at home in Tibet as in Italy. Its prelates pontificate with mitre, cope, and crozier. The Paternoster of Lama-land is the sacred sentence *Om Mani Padmi Hum*, which seems to mean: "Oh the jewel of the lotus!" the lotus being the sacred flower of Buddha. What strikes us as a spiritless formula is held here so edifying that the Tibetans go about ejaculating it in and out of season; and it is displayed in every possible way, on amulets worn about the person, on the walls of houses and temples, on flags fluttering by a grave, on tablets of slate, on stones built up into a cairn, sometimes on a mountain-side in letters large enough to be read miles away.

Tibetan Lamas with Prayer-Wheels. From a photograph
(Note the large Prayer-Mills set within the enclosure in the background)

The most characteristic feature of northern Buddhism is the use of prayer-mills for multiplying such vain repetitions. They are of all sizes, from mere toys at which the faithful can take a turn as they walk along, to huge bobbins that whirl the silent eloquence of thousands of written aspirations. They stand not only in the temples but on the public ways, where the sound believer will not pass without grinding out for himself a measure of merit. Some are of great size, containing a whole circulating library of devotion and needing two or three men

to work them. Some are kept turning by wind or water, or by the draught of a fireplace, the forces of nature being called in to worship. A smoke-jack, a barrel-organ, or a grind-stone might here be adapted as valuable means of grace. This mechanical form of religion, to us so ridiculous, has an origin older than Buddhism, probably in the sacred symbolism traced back, in Mr. William Simpson's interesting study of *The Buddhist Praying-Wheel*, to the solar revolutions. It is very important to turn the machine the right way, with the sun; and more than one foreigner has to tell of mere children flying into a passion of rage at impiously inexperienced attempts to reverse the working of the oracle.

Knowledge and power alike are kept in the hands of the Tibetan priesthood, the numerous caste of lamas, set apart from the world, and vowed to a poverty which through the contributions of the faithful becomes often only nominal; their red and yellow robes may be sometimes seen of rich material but sewn in patches to represent rags. Their lamasseries, or convents, contain hundreds and thousands of these drones attached to the temple services, while others live as solitary anchorites or guardians of remote shrines, or wander about as pilgrims. The head of the faith is the Dalai-Lama, who is taken to be specially the incarnate spirit of Buddha. Civil power was exercised in his name by a regent called the Nomakhan, with a staff of ministers and a sort of national council, more or less controlled by Chinese officials styled Ambans. The selection of this Grand Lama is a far from clear point: rumour has it that China was apt to use a preponderating voice in the conclave, and that a pontiff who proved not duly subservient to the distant emperor had a good chance of dying young. It appears that the Dalai-Lama had been aspiring to make himself an active despot, till he lost credit by flying before the British advance. Since then, threatened in turn by a Chinese military expedition (1910), he again fled to India, but came back to head a movement against Chinese domination (p. 74*d*). His evasions went to bring forward a sort of anti-pope known as the Tashi-Lama, who hitherto had exercised spiritual rather than temporal authority. Certain local lamas are taken as tabernacles of inferior divinity, believed to be incarnated in children chosen by lot or otherwise.

The capital of this power is Lhasa, standing more than 11,000 feet high in the more thickly-peopled southern part, a city almost unknown to Europeans, till the British military mission from India made its way there in 1904. It is a poorly-built and badly-drained place, with narrow streets and flat-topped houses, and with extensive areas of grass and trees in its dirty suburbs. There are houses entirely built of horns of oxen and rams. On an eminence, masterfully overlooking the town, towers the Potala, huge palace citadel of the Grand Lama, crowned by a golden dome. About this goal of pilgrimage from Tibet and Tartary are great lamasseries, occupied by thousands of monks, and said to be rich in gold statues and other treasures dedicated to the Church. More than half the population of Lhasa, the lowest guess at which is 15,000, appear to be lamas. Foreigners from the bordering countries are settled here as traders, and there is a garrison of Chinese as well as Tibetan soldiers.

The Tibetans have some curious customs, such as that of putting out their tongues by way of civility. The women are said to disfigure their faces with a kind of black varnish, and under this mask are free to mingle in out-of-door life. The handsomely-formed features of some of the men have been remarked in contrast with the coarse, flat type more common among Mongols. Both sexes wear wide robes, with gay caps and girdles, at which hangs the var-

nished bowl carried by everyone, sometimes made of costly woods. Exquisites adorn their flowing hair with jewels and gold, but with such decorations dirt is held not out of keeping. The most remarkable peculiarity of Tibetan life is the survival of polyandry into a comparatively high stage of civilization. This custom seems to be connected with a general state of poverty that keeps the mass of the people lean, while the lamas often grow fat in their rich convents.

Agriculture is practicable only in the valleys, where, at the altitude of Mont Blanc, can be grown a black barley that forms the staple food of the people. Butter and milk also enter largely into their diet; and they are not such good Buddhists as to refuse mutton, pork, and other flesh when they can get it. Even the horses are sometimes fed upon meat, for want of pasturage. Snuff-taking

The Yak, the Tibetan "beast of burden" Photo, Frith

appears to be one of the national indulgences. An acid beer made from barley is a common drink, and all classes are fond of tea made with butter, brick-tea being the main import from China. The bricks of tea used to pass as currency; as now do Indian rupees, for Tibet is not so isolated but that it carries on a considerable trade with the south of the Himalayas. English as well as Russian and Chinese cloths are imported; and in return Tibet has plenty of wool to send away, besides what is spun and woven at home. The precious metals are abundant, but seem to be much absorbed by the lavish ornamentation of temples. Salt and borax are procured from the efflorescence of lakes. The musk of a Tibetan deer is highly esteemed, which, made into a paste with powdered aromatic plants and gold-dust, goes to perfume the costly joss-sticks that count as the most acceptable offering to Buddhist idols.

An animal almost peculiar to Tibet is the yak, a large grunting ox with outwardly-curving horns and long silky hair, found wild up to a height of nearly

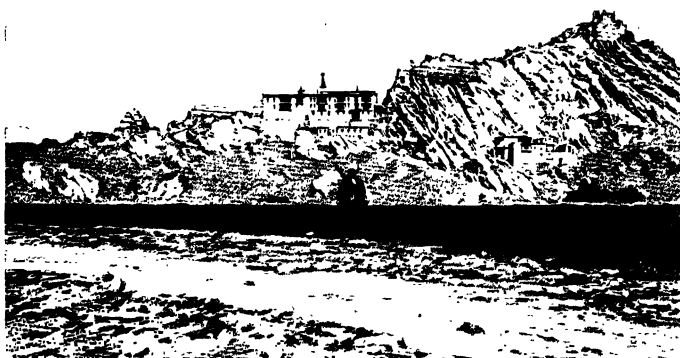
20,000 feet, and tamed by the people as a beast of labour. On the table-land yaks take the place of the camel on the steppes; hardy sheep also coming into use as burden carriers. Among other domesticated animals goats are valuable for their hair; and a breed of large fierce dogs guard the houses and flocks. Antelopes, jackals, foxes, wild dogs, wolves, and bears people the wilds; on the side towards China there are monkeys, panthers, boars, and other fauna of a rather warmer region than the barren uplands, where the wonder is that so much life can support the severe winter. Even in the north, small red apes have been seen playing on the ice near the chamois, and shy herds of koulan, which some naturalists look on as ancestor of our horse. Birds are not so plentiful; but the lark soars here at an enormous height above pheasants, partridges, and grouse, preyed on by eagles, vultures, and ravens. Snakes and lizards live under alpine conditions; and fish are found in the lakes at a far greater altitude than in Europe.

The vegetation is poor, unless where sheltered valleys nurse trees, chiefly willows and poplars, or more luxuriant woods in favoured districts. On the lofty plateaux grow only thin hard grass and scrubby bushes, whose stalks snap like glass in the thin dry air. For fuel here man depends mainly on *argols*, the dried dung of animals, and for food upon the milk and flesh of his herds. The climate is very dry, the monsoons having spent their store on the southern slope of the Himalayas; and but little snow falls on the frozen table-lands. Much of the country must be quite uninhabitable in winter; but it is astonishing at what heights the people and their herds contrive to live, where strangers are oppressed by headache, buzzing in the ears, and other symptoms of mountain sickness. Storms of chilling wind, sometimes loaded with fine snow or huge hailstones, will be encountered by a traveller equipped at once with fuel and furs, and with ice on which he may have to water his animals under a parching sun-heat.

In the winter of 1890, M. Bonvalot, accompanied by the late Prince Henri of Orleans, made his way from Siberia to Tong-king, through Tibet, crossing wave after wave of mountains, separated from each other by thirsty plains and briny lakes. Alternately baked and frozen, the temperature at night falling far below zero, these adventurous travellers often saw the soil dappled with saline efflorescences, hardly to be distinguished from the streaks of thin snow gathered by the winds; and they might have to lie down without being able to kindle a fire from incombustible roots too strongly impregnated with salt. Among icy peaks, over 20,000 feet high, they found the ground flooded with volcanic lava. Warm springs burst up beside frozen rivers, and bubbling geysers had been turned into cones of ice. The setting sun sparkled upon gigantic jewellery that in a few minutes paled to dull ice-blocks: such a sight may have suggested Sindbad's Valley of Diamonds. Their only road was the tracks of pilgrims making for Lhasa, from which these strangers were turned away when their approach had been announced to the Government. Rarely they caught sight of nomad natives, dressed in greasy sheepskins against the cold, whose first impulse, at the sight of a band too strong to be robbed, set them driving off their herds to more inaccessible heights.

The most temperate and productive part is on the south-east, where moist winds from the sea penetrate through gaps of the Himalayas, and the rains flow back by comparatively fertile river valleys. Through this region M. Bonvalot and other travellers have been allowed to pass, after more or less polite warnings-off from approach to the sacred capital. Since then, Dr. Sven Hedin contrived to

enter Tibet for the second time, on his last great journey filling up a geographical blank of 65,000 square miles. Exploration may in future lie more open, now that restrictions on trade should be removed by the treaty secured as a result of the British expedition.

The western side of Tibet, some 30,000 square miles, forming the province of Ladak or "Little Tibet", is, as already mentioned, a dependency of Cashmere. The chief town is Leh, in a valley 10,000 feet above the sea, by which runs a great trade route between India and Tartary, much troubled by lawless border tribes. In religion and other respects the thin population of this dry cold upland are mainly akin to the Chinese Tibetans, without much sign of the wealth that here

Monastery in Ladak

and there can accumulate on the other side. Being under the influence of our government in India, Ladak has been often penetrated by sportsmen and explorers, always to be turned back from the frontier of Chinese territory. Their reports chiefly dwell on sternly wild scenery, with rare oases in the wooded valleys or orchards of hardy apricots that embower the poor villages. Of the mountains about Ladak, Sir Francis Younghusband relates that they look like a dreary succession of cinder heaps, with monasteries perched on every prominent rock as their only picturesque feature. It is the most forbidding aspects and the most unprepossessing borderers of Tibet that are least unknown to the world.

CHINESE TURKESTAN

On the north the inhospitable uplands of Tibet fall to the steppes and deserts of Central Asia. North-westward lies a deep and wide hollow between the Kuen-lun and the Tian-shan ranges, diverging eastward from their junction with the Pamir plateau. Once the bed of an inland sea, enclosed on three sides by a horse-shoe bend of mountains as high as the Himalayas, but on the east more open to the Mongolian plains, this hollow runs to the point of a triangle, based on the Pacific, which is roughly the shape of the Chinese empire. The vast lake has now shrunk into a waste of sand-hills, swamps, pools, saline scabs, among

hich flowing streams water the fields of a thin population, perhaps a million, pread over half as many square miles. Most of this is a sandy plain, sloping astwards as the basin of the Tarim, which, gathering up many affluents into channel larger than the Rhine, loses part of its volume in the thirsty soil it raverses; and finally is absorbed about Lob Nor, on the edge of the great Mongolian desert, a disappearance so strange that Chinese geographers long held the Tarim to be the upper course of their Yellow River. Dr. Sven Hedin ound a new lake to the south of the old Lob Nor basin, now a dried-up morass, its northern edge marked by the ruins of towns and temples.

The Tarim basin, with its bordering mountains, forms the Chinese province of Sinkiang, marked on some maps as Kashgaria, and once better known to us as Chinese Turkestan. It has a somewhat mixed population, chiefly of Moslem Turks and Buddhist Kalmucks, occupying patches and ribbons of cultivation along the streams, whose water can be drawn off by canals before it is sucked into the desert or evaporated into an almost rainless sky. The principal affluent of the Tarim is the Yarkand, flowing from the lofty ranges of Cashmere, through the least poor region of this province. On it stands Yarkand, once the largest and most important city here; but of late it has much dwindled, and the chief place is now Kashgar, on a northern tributary of the Yarkand, said to have over 70,000 people, dominated by a Chinese citadel. A generation ago Yakoub Khan of Kashgar attempted to found an independent Mohammedan state with Yarkand as its capital, and in this usurpation showed so much ability and activity that he bid fair to emulate his predecessor, Timour the Tartar, if he had not been treacherously murdered. China recovered the country after terrible massacres such as have repeatedly helped to lay it desolate. Man and nature seem alike cruel, where ruined cities and once flourishing oases are found blasted by war and half-buried beneath shifting sand-hills and the reed jungles of swampy streams. In what is now a wilderness, Dr. Stein has recently unearthed long-forgotten temples, dwellings, and records in Sanscrit, Chinese, and other languages.

About these two cities lies the richest part of the province, towards its western end, the farthest recess of that great mountain-walled amphitheatre that makes the Chinese empire. On the north the Tian-Shan range shelters other towns, such as Turfan and Hami, which do a good trade on their regular market-days, and are surrounded by flourishing bits of oasis, where, among other products, the people have learned to grow poppies for their Chinese masters. Most of the land is at present fit only for homes of savage nomads and beasts, among them tigers that prey on boars and deer. It is asserted that a breed of wild camels roam the deserts, but these may be merely runaways from Mongol encampments. The tree most seen fringing the water-courses seems to be the poplar, its boughs often saturated with salt from the sour soil; and in the desert tamarisk bushes serve to anchor the wind-blown dunes. The province has a renown for jade, an ornamental stone much prized in China; and other valuable minerals could doubtless be extracted from the mountains. Khotan, below the southern range, is the centre of jade-working, also noted for carpets of silk and wool interwoven with gold thread.

Colonel Prejevalsky, the Russian explorer of this region, speaks warmly of the environing mountain valleys, where apples and apricots often rot as treats for bears and wild boars; but he has a poor report to give of the plain, and the half-naked inhabitants who make dismal homes for themselves of its rank reeds, sometimes growing an inch thick and 20 feet high. "It would indeed be difficult to

picture to one's self a more desolate landscape; the poplar woods with their bare soil, covered only in autumn with fallen leaves parched and shrivelled by the dry heat, withered branches and prostrate trees encumbering the ground, cane-brake crackling under foot, and saline dust ready to envelop you from every bough that you brush aside from your path. Now, again, you come to acres of dead poplars, with bare and broken boughs, lifeless trunks, never decaying but crumbling away piecemeal, to be hidden in layers of sand. But cheerless as these woods are, the neighbouring desert is even more dreary. . . . Whichever way you turn, an ill-favoured plain meets your eyes, covered with what seem to be large mounds,

Street Scene, Yarkand. From a photograph by Captain H. H. P. Deasy, F.R.G.S.

but which are really hillocks of clay surmounted by tamarisk, between which the path winds, every surrounding object shut out from sight, and even the distant hills barely visible in blue outline through the dusty vapour which fills the atmosphere like fog." In all his travels through Mongolia he had not seen a more naked wilderness than that about the reed thickets of Lob Nor; whereas Sir F. E. Younghusband's experience gave the palm of repulsiveness to the gravelly Zungarian deserts on the north; and later on the same traveller pronounced the lofty gravel plains about the Karakorum pass into Little Tibet, at a height of 17,000 feet, to be the "most utterly desolate country on the face of the globe".

Across the Tian-Shan Mountains comes Zungaria, a dependency of the same province, like it largely a desert, often watered with blood. Two hundred years ago its Kalmuck people rose to sudden power, overrunning Central Asia as far as Lhasa, but before the middle of the eighteenth century they were conquered and almost exterminated by the Chinese. In our own times a Mohammedan rising led to fresh massacres on either side that again ruined a country where all man's energy is needed to war with his surroundings. The most fertile part of this region, the elevated valley of the Ili, shut off by mountain ridges from

the desert plains, is said to have lost nine-tenths of its population in the rebellion, when its most prosperous town, New Kuldja, was laid in ashes; but it begins to be repeopled by Kirghiz and Kalmucks, of whom the former show a knack of thriving at the expense of their simpler neighbours.[1] The lower part of this valley comes into Russian territory, as we shall see farther on. Zungaria's chief towns, once places of renown, are Old Kuldja in the Chinese part of the Ili valley, and Barkul and Urumtsi, Tartar garrisons and stations on a great trade route which runs to China by the north side of the Tian-Shan. Urumtsi is considered the capital of the whole Chinese province.

The importance of Zungaria lies chiefly in its leading up to passes which make natural openings between the Chinese and the Russian empires, here meeting in the dominant block of the Tian-Shan range, well named the Celestial Mountains, their bases often lost to the eye while the snowy tops may be seen floating in the clouds a hundred miles away. The Kuldja district was, during the rebellion, occupied by Russia, then restored to China; but those who know the country best make little doubt that the whole province might fall back into the hands of Russia if she cared to extend her boundaries in this direction.

MONGOLIA

Northwards and eastwards the Sinkiang province merges into Mongolia, shut in between the mountain walls of Tibet, China, Manchuria, and Siberia, and on the north-west broken by ends of the Altai and other great ranges straggling out from that side. Almost as large as China Proper, this offers beside it a striking contrast of barrenness and barbarity, the whole population being no more than two or three millions. The swarming Chinese, indeed, have pushed out upon

[1] The frequent depopulation and repopulation of this region must have brought about a great amalgamation of races, distinguished now rather by religion than blood. In past times it seems to have been a Siberia for Chinese exiles. Towards the end of the eighteenth century its inhabitants were largely recruited by the Torgauth Kalmucks, a remnant of whom are still found on the Volga, while the main body has its head-quarters about Karashar and the adjacent lakes to the south of Zungaria. Their strange history has been renowned by De Quincey's *Revolt of the Tartars*, in which that imaginative writer seems to have palmed off upon his readers a good deal of fiction among the dramatic facts of an obscure narrative. The Torgauth tribe had emigrated from the frontier of China in the sixteenth century, to put themselves under the czar, who settled them on the Volga. But, finding the yoke of this new master not light enough, in 1770 they returned to their old allegiance, carrying out a perilous exodus paralleled by that of the Israelites. Hundreds of thousands strong, driving their herds of horses, cattle, and camels, they set out in the depth of winter, and made such forced marches that in a week they had reached the Ourals, nearly 300 miles away. But the Russian Pharaoh was soon at their heels. Delayed by the vain siege of a frontier fortress, they found themselves harassed by Cossacks and Kirghiz warriors, while a Russian army was put in motion against them from Siberia. Even when free from attack, they underwent severe sufferings and losses: when the snow lay on the ground, they could not pasture their animals; when it melted, their distress was want of water. The people perished by tens of thousands, as their pursuers pressed them on to the knot of lakes and rivers lying north of the Sea of Aral, but there they could have no breathing space. In two months they reached the banks of the Irghiz, beyond which their progress was hindered by rapid streams. The Russian forces, following hard upon them, were guided on by a track strewn with corpses, the carcasses of animals, and the household goods of the fugitives which they could no longer transport. Some way beyond the Torgai they would fain have halted to restore their lean herds among rich spring pastures; but the approach of the enemy hurried them on into a wilderness where many perished, and the survivors, struggling towards water, found themselves headed off by the light Kirghiz horsemen, through whom they had henceforth to fight their way. Reaching Lake Denghiz, near the border of Russian Tartary, men and beasts crowded down into it with such eagerness that many were drowned in the longed-for water, soon mingled with blood under the Kirghiz weapons. De Quincey's picturesque account of this scene seems exaggerated; it is his own invention that brings the Chinese emperor on the stage and describes the pursuit as checked by Chinese artillery and cavalry dashing up in true Buffalo Bill style. By this time the refugees must have been too much scattered for any such thrilling rescue. In some less theatrical fashion the Chinese Government did receive and protect, within its borders, the remains of that sorely tried host, that in seven or eight months had travelled more than 2000 miles, losing on the way half, or more, of their number. Chinese accounts, probably overstated, give 300,000 as arriving on the frontier, besides half as many who straggled in during the next year; but nothing like this strength is indicated by the present condition of the tribe, who now have only a faint remembrance of their forefathers' exploit.

the edge of the steppes, bringing their industry to bear in its bordering valleys; but soon after passing the Great Wall, and the crests that elevate it, the traveller finds himself on a plain of bleached green, seamed by banks of sand-powdered rock; and, when he can clear his eyes from the dust of his jolting vehicle, he may have to strain them far and wide for such a sign of life as here and there a group of tents and a flock of cattle like insects settled on the ground.

This still is the "Land of Grass", that can support man and his flocks. The heart of Mongolia is the great Gobi Desert—Shamo as it is called by the Chinese—that forms the eastern end of a belt of arid land running almost across Asia. The wastes about the Tarim basin belong to the same belt, and are by some writers included in the name of Gobi, by others distinguished as the Takla-Makan Desert. For some thousand miles, with a breadth of 300 to 400 miles, this barren tract, once an Asian Mediterranean, covers a plateau at a mean height of 4000 feet, rising higher on the east side, and here and there sinking into troughs of depression. In parts, after rain, it may be found bearing a short thin grass like our sea-side links, and report speaks of ranker herbage in remote recesses; but most accounts present an expanse of loose reddish soil, strewn with pebbles and bones, where only a little thorny and wiry vegetation struggles to life, a dreary prospect, relieved by wave-like hillocks of sand, by rocky islets here and there, by patches of pale scrub, by scums of nitre, and by salt-crusted lakes that, glittering like ice, prove to thirsty travellers a bitterer mockery than the delusive mirage. Stunted trees are so rare that to the superstitious natives they become places of adoration, like the lonely flag-studded cairns, *obos*, that make monuments of their Buddhist faith. The wild beasts that can live here are such as small shy marmots, burrowing underground out of harm's way; and fleet antelopes, always on the watch against wolves and other ravenous prowlers. Loathsome vultures hover about the track of caravans; and ravens prey on the human bodies which, except in the case of the more distinguished dead, find no other burial than to be exposed on the wilderness. The domesticated animal most at home is the camel, that browses greedily upon harsh bitter herbage, sufficient pasture for sheep also, but not for horses or cattle, which must be kept on the grass lands. The sulky "ship of the desert" is at present the vehicle of the great tea caravan route across Mongolia and over the Gobi, with Kalgan and Kiakhta for its Chinese and Siberian frontier stations. Transport on this makes the main industry of the people, after herding. When a railway comes to be made here, it is said that half a million of camels will be thrown out of work. The Gobi is already crossed by telegraph wires between Peking and Siberia, not to speak of motor cars struggling here.

To the north the characteristics of this Asian Sahara are encroached on by mountains enclosing large saline lakes. These mountains play the same part as the Himalayas in arresting the moist winds from the ocean, so that their northern sides may be thickly wooded and veined with streams pouring down to the great rivers of Siberia, while the southern slopes are nakedly dry, soon sucking up what rain finds its way beyond the ranges. The climate of Mongolia, exposed to variable winds, is extreme and uncertain; summer heat being succeeded in a few hours by hard frost at night, often sinking far below zero. The water-courses, now and then set running by heavy cloud-bursts, quickly trickle away; and hardy plants root themselves in the loose soil, soon to be whirled off by such withering simoons as are the terror of North African caravans. Even

in stiller weather the air may be hazy with invisible sand, else the eye loses all sense of distance on a clear horizon where sun-burned rocks stand out like hills, and a dim mountain-edge appears to hang above the earth many hundred miles away.

The Mongol inhabitants, vaguely styled Tartars also, do little credit to a name once so renowned that it has been extended to a whole family of the human race. They have split up into feeble tribes, whose princes pay nominal allegiance to Peking, with an obligation of military service which few of them can render

Mongol making his Devotions before a Cairn or *Obo*

effectively. Of their old formidable qualities the Mongols scarcely retain any but a centaur-like horsemanship, and this seems related to their common laziness, for they are unwilling to use their own legs. Of gentler virtues the only ones claimed for them are hospitality after their means and a certain childlike simplicity which lets them be easily cheated by the astute Chinese. Living in grimy tents, warmed by the dull glow and smother of dried dung, they have a bad name for dirt, gluttony, and drunkenness. Their favourite food is mutton, but no flesh comes amiss to them. The use of cold water, whether internally or externally, is not among their habits; but they are fond of tea, made by them into a kind of broth, mixed with fat and oatmeal. They ferment an intoxicating drink out of mares' milk, and greedily seek the spirits distilled by their neighbours, the stronger and fierier the better. When a hungry Mongol has eaten up the best part of a sheep, and muddled himself with what liquor he can get, the only thing he wants to make him happy is a pipe or a pinch of snuff. The aristocracy of nobles and priests is not much more refined, social differences being chiefly

expressed by the size of a man's herds and the number of his slaves. Cultivation is out of the question in most parts, and where the ground can be tilled it is apt to be taken up by the Chinese. The Mongol is so far a nomad that he moves about in search of pasturage for his herds. The milk of cows, yaks, and mares is all turned to good account by him. Butter, despised by the Chinese, plays a great part in Mongol life, even supplying a material for religious art, as some lamas are skilled in moulding figures of idols, men, beasts, flowers, and so forth, all out of butter.

Young Mongolian Lama. From a photograph

The slaughter of cattle should be a strain upon the Mongol's conscience, for his Buddhist religion, in its purity, forbids the taking of life. He belongs to the Lama church, whose easier observances are devoutly practised. The machinery of prayer wheels and barrels, is found fully at work here, beside sacrifices derived from grosser superstition. Extraordinary respect is paid to the lamas, said to make one-third or more of the male population, the mere laymen being looked down on as "black men". Under the title of "white man" every family has at least one son consecrated to greater laziness than his brethren can enjoy. The lamas who do not live at home as family chaplains, or wander at large, gather into communities, whose convents may be a cluster of tents. Few of them know much about their sacred writings, which are in the Tibetan language, though the Mongols have an alphabet of their own, put to little use. They look to the Grand Lama of Lhasa as the head of their faith; but there is also a Mongolian pontiff, and the country is blessed by many local *chuberons*, regarded, in some sense, as living shrines of Buddha. These saints, chosen in infancy, must find it rather dull work to sit for adoration, burdened precociously with such a character, and we need not be surprised if they do not always come up to the professions made for them. A recent French traveller heard of one up-to-date young idol who had so far emancipated himself as to ride a bicycle; another has been caught smoking cigarettes. The ignorance of the faithful is shown by the fact that M. Huc and his comrade, who assumed the priestly yellow robe, seldom failed to be saluted with due respect, as real lamas of a sort, in those *partibus infidelium*, as was also the experience of Mr. Rynhart in our own day. Among the pious works they found practised by real lamas was the cutting out of paper horses to be scattered to the winds, and thus, by help of prayer, conveyed to the relief of distressed travellers.

The seat of the Mongolian chief lama and of the Chinese governor is Urga, among the northern mountains, which is also the focus of the trading routes and collects some 200,000 people at its annual fair, the ordinary population being

about 30,000. Till lately, brick-tea, sawed into lumps, was the medium of exchange. The great caravan road passes between two lamasseries that together house some 10,000 more or less holy men; and in connection with the palaces and temples of this Mongolian Rome there is a kind of college at which young lamas are trained in such learning as is thought needful for their calling. Pilgrims flock hither as well as traders, bringing offerings to their patriarch, whose wealth is stated to include a large number of slaves. For all its sacred renown, Urga, the only large place in Mongolia, is described as more of a dirty camp than a city, above which the residence of the Russian consul stands significantly conspicuous: some Russian maps already include this in the territory of the czar, and Russian money is here current. Other towns on the borders are important only as marts between the Mongols and their more civilized neighbours. In the same district as Urga are the remains of Karakorum, once capital of the Mongolian khans; and other ruined or deserted cities preserve some memory of the days when this now degenerate people, under Genghiz Khan, burst through the great wall of China as they had overthrown the mightiest cities of Central Asia.

MANCHURIA

To the east of Mongolia a quadrilateral of valleys and table-lands, enclosed on all sides by mountains, was the cradle of the Chinese Manchurian dynasty. On its west side runs the Khingan range of extinct volcanoes, crossed by easy passes; on the north the Lesser Khingan separates it from the Amur valley; towards the sea swells a highland country of which the principal range is the Shan-alin, "White Mountains", whose limestone crests rise into snowy peaks; on the south it is bounded by the mountains north of Peking, through which the Great Wall comes down to the Gulf of Liao-tung, an inlet of the Pechili Gulf. The western side of this region is sometimes known as Inner Mongolia, the Gobi Desert being here continued over the Khingan range. The east side was Manchuria Proper, said to have been once fenced in by a stockade such as might be a matter of pride rather than defence with eastern princes. This and nominal barriers have disappeared from a country which long was to the Chinese emperors what Normandy was to our Plantagenet kings, and which for a time seemed on the point of becoming a Russian province.

Manchuria, of which we knew little till recent events showed its importance, is at least six times as large as England and Wales, with a mixed population of nearly twenty millions, among whom the original Mongol stock are now much in the minority, and losing their features by intermarriage with Chinese immigrants. The Manchus are a more settled and cultured people than their nomad neighbours of the steppes, while more vigorous than the Chinese, who yet overlay them through greater industry and keener commercial instinct. Still noted as skilful archers, if that accomplishment were of much service in modern war, they keep their name chiefly through the service they render of supplying from their eight tribes or "banners" a numerous body-guard for the Chinese imperial power; and their language might have been forgotten had it not remained the court speech of China.

Watered by two great rivers—the Sungari, flowing north to the Amur, and the Liao, that takes a southward course to the Yellow Sea,—this is a very varied

country, including fertile plains and valleys as well as deserts, swamps, and vast mountain forests whose timber often recalls England. While the manly Manchus supplied soldiers to China, Chinese farmers and artisans have avenged themselves for their subjugation by taking peaceful possession of Manchuria, spreading out over the richer parts, now carefully cultivated and alive with towns

The Old Wall, Mukden, Manchuria. From stereograph, copyright, Underwood & Underwood, London

and villages. The largest city was Mukden, the sacred birthplace of the dynasty, which has nearly 200,000 people; but this southern capital is like to be overgrown by Kwangchengtse and Kirin in the centre, while Harbin, farther north, has sprung up like a mushroom about the branching point of the Russian line to Vladivostock. Behind the southern gulf is Newchwang, that once stood at the mouth of the Liao, but here the land grows out so fast that its harbour has had to be moved 30 miles down stream, where, still 20 miles from the open sea, it makes one of the chief treaty ports of the empire. This region, sometimes included in maps of China Proper, is hardly to be distinguished from northern China in population, civilization, and produce; and the same characteristics shade off into the central province; but more wild and thinly peopled are the Amur borders, which have been used as a Siberia for Chinese criminals. The richest part is

the central valley, where now runs the railway by Newchang up to Harbin.

Many parts of Manchuria are well suited for wheat, but the fields appear more taken up with pulse, and tall millet also makes a goodly show. A special product is oil, chiefly extracted from beans. Another is ginseng, a root so highly valued in China for its supposed medicinal properties that it is said to be in danger of extermination. Manchurian tobacco is much esteemed; indigo is grown, and the demand for opium finds a supply here. Fruit, including the vine, thrives well. Timber, at present too much wasted, might be a source of wealth, and already supplies a large boat-building industry. The country appears to be rich in gold and in iron, as it certainly is in coal. The climate is a healthy one, which has been compared to that of Canada, the winters so severe that people sleep on a sort of raised platform warmed by flues. A drawback to settlement is the extent to which brigandage and violence have flourished, especially in the northern mountains, an evil not likely to be lessened in the troubled state of transition through which the country is now passing. It is plagued also by wild beasts, among them the tiger, which, here growing to a great size, adapts itself to a northern climate by a thicker coat. A variety of game, ranging from this "woolly tiger" to the furry sable, makes Manchuria a fine hunting-ground for adventurous sportsmen. Furs and skins, and the tanning of them, are an industry employing both wild and settled people. The rivers abound in salmon and other fish. In various parts magnificent scenery is found, such as Mr. James describes in his expedition to the "Long White Mountain", that central knot of the main range, where the Sungari has its head-waters in rushing falls from a great crater-lake set about with fantastic needle peaks, hidden among leagues and leagues of virgin forest. In the far northern wilds of the Amur, gold turned up so plentifully as, a generation ago, to bring together thousands of Siberian adventurers and runaway Chinese convicts, who formed themselves into a republic under the name of Sholtoga, growing quickly rich till it was exterminated by the Chinese authorities.

Manchuria once extended beyond the Amur, but nearly half a century ago Russia fixed herself on the long-disputed left bank, to keep casting a covetous eye on the rest of this province, not only for its natural wealth but for its sheltered coast-line, giving access to the sea in winter when the ports of Siberia are icebound. It is said that her designs on Manchuria were inspired by rumours of great gold deposits; but an aggressive policy here would be amply accounted for by the need of a more convenient harbour than Vladivostock, originally intended to be the terminus of her Trans-Siberian line. Such a haven she hoped to have secured at the southern point of Manchuria, where, among rugged bare hills Port Arthur was dredged out and fortified to land and sea as a station for ships of war, while some way up the eastern side, in Talien-wan Bay, a commercial port was opened, and the new town of Dalny built on a scale and with a solidity that showed the Russians secure of making a permanent settlement here. To this point they directed across Manchuria a branch of the Trans-Siberian railway that soon openly took the rank of the main line. Foreigners might well ask how any power should go to such expense in founding establishments within the bounds of territory not its own.

An attack on the railway by Boxer insurgents gave the Czar's government excuse for taking military occupation of the country; then it began its task of restoring peace by a ruthless massacre on the banks of the Amur. Five thousand

KOREA and Southern MANCHURIA. Natural Scale 1:12,000,000. English Miles 0 20 100 200. Railways open .... projected ....

is the lowest estimate of the carnage among men, women, and children. This was the prelude to a protectorate of Manchuria, where the Chinese authorities were nominally restored to power while the Czar's troops remained in possession, till startling events showed Russia that her designs upon Manchuria and its neighbour Korea had to reckon with more resolute opposition than from the decrepit Chinese Empire.

Japan had never ceased to keep a jealous eye on Russian encroachments, which, from Manchuria, threatened to spread to Korea. Russia, ill-informed as to the strength of the new Eastern power, was taken aback by a storm that for years had been gathering on the horizon. The war broke out, whose moving incidents are fresh in our memories. Japan took the initiative, and in a few days had crippled the Russian fleet. Having secured command of the sea, she landed in Korea a large and well-equipped army, that in severe weather pressed forward to Manchuria, where the first encounters showed the Europeans how vainly they had despised such an enemy. The Czar's army was beaten in every battle; his fleets were annihilated; Port Arthur was taken after a hot siege. The peace that followed seems a check to Russia's ambition on the Pacific for many a day, yet some military authorities judge that a few more weeks of war would have exhausted Japan.

CHANGES IN THE FAR EAST

The shock of these events made itself felt all over Asia, where dreamy pride saw the hosts of Genghiz Khan and Timour reincarnated in the victorious forces of Japan. Like wildfire ran the news that an Asiatic nation had more than held its own against a great European power. As far off as the shores of the Levant, oppressed Syrians raised their heads to catch the distant thunder about Port

Arthur. Egyptians, Persians, Siamese, turned their eyes to Manchurian battlefields. Excited Bengal baboos found courage for throwing bombs at the officials who had taught them the name of oppression. We hardly yet know what wild Tartars and Kalmucks may be thinking of Russia's humiliation. Nowhere was the effect more upheaving than in the vast empire, one of whose half-detached provinces made the theatre of that war. Already roused from traditional lethargy by its own defects, and by internal tumults, China stirred itself to ask more loudly why it, too, should not follow the example of regeneration set by Japan. The constitution of the state and the character of the nation have always been such a puzzle to occidentals, that from outside it is difficult to reckon the force or the direction of a movement appearing likely to throw the whole country into a social cataclysm. Yet the cumbrous and complicated institutions of China are so dovetailed into each other, and so firmly cemented by use and wont, that the edifice might stand fast against storms which overthrew some of its most imposing features.

After the death of the Emperor and the domineering Empress Dowager in 1908, by an arrangement that seems to us a Chinese puzzle, the throne was filled by a child, with his father for Regent, who gave professions of a progressive policy. In 1906, commissioners had been charged to report on occidental forms of government, with a view of shaping a constitution for China. Advice was not wanting from Japanese prompters, who took a leading part both before and behind the scenes of Chinese politics. The unserviceable militia began to be replaced by an army of modern training and equipment, with Japanese as its chief instructors. A small navy was put in being as core of a larger one on paper. A uniform national coinage was undertaken, and provincial mints turned out a quantity of ten-cash pieces, to count as cents in the proposed standard coin whose place was as yet taken mainly by foreign dollars. There was talk of jury trials, claimed as an old Chinese institution. The new Constitution, with Parliament, Councils, Cabinet, Budget, and Code of Laws, was announced as on the stocks, to be launched in a year or two.

Suddenly, in the autumn of 1911, a revolt broke out in the province of Szechuen, spreading down the Yangtse to the cities of Wuchang and Hankow, about which there was hot fighting. Many of the newly trained soldiers joined the insurrection, that soon mastered the central region, where a revolutionary Assembly met at Nanking. The Government called to its aid Yuan Shih Kai, a viceroy whose reforming tendencies had brought him into disgrace; and he, becoming practically dictator, made some effort for a constitutional monarchy. But the revolutionists demanded a republic, of which the head was expected to be Dr. Sun Yat Sen, an educated Chinaman who, in persecution and exile, had long been busy in stirring up the "Young China" party now set on its feet. Vain negotiations went on between Peking and the rebels; the helpless Regent resigned his office; then, early in 1912, the Manchu dynasty abdicated in the name of the boy-emperor; and a republic was proclaimed with Yuan Shih Kai as its provisional head. In the Council, formed as nucleus of a Parliament, he announced a long list of reforms, with earnest exhortations as to securing the good will of foreigners and respecting international obligations. A national flag was adopted on the United States model, with five vari-coloured stripes to represent the Middle Kingdom and its dependencies. One pressing difficulty was met by treating for a loan of £60,000,000 from the six powers having interests in China,

whose regeneration they all are bound to watch with concern; but the hitches in this negotiation pointed to finance as a rock ahead for the republic. Time will show how far this government can hold together after such a snapping of time-honoured bonds, and whether the unwieldy power may not break up in the birth throes of a new order.

The most dynamic and far-reaching change to which China now submits is in its national education. The obfuscating system of examination in mere verbiage has been swept away, in favour of more useful knowledge. Thousands of Chinese students have gone to be taught in Japan, and hundreds to Europe and America, where their numbers seem likely to increase, while cautious authorities are said to be alarmed by subversive notions which young men bring back from the neighbouring empire. At home the founding of colleges and medical and technical schools under Western influences goes on apace. Temples and other public buildings are turned into seminaries, for the support of which the Court lately appropriated two-thirds of its allowance for theatrical entertainments. As yet knowledge is perhaps most freely disseminated from the missionary schools that, after neglect and opposition, have now sprung up into pregnant activity. This encourages the missionaries to take a more confident tone, and they call for special efforts to illuminate the "awakening of China" with Christian doctrine. But the contradictory teaching of rival churches makes a serious stumbling-block to their hopes; and some observers judge that if Christianity ever strikes deep root in China, it will develop a new form, growing free from Western influences and taking colour out of elements native to the soil. Meanwhile the instruction of China comes largely by way of Japan, where the European literature most admired would not recommend itself in our Sunday schools. The invention of an alphabet promises to make reading an easier accomplishment for all classes, who may not so quickly learn what is best worth reading. There are already many scores of Chinese newspapers and other periodicals, whose editors appear, as a rule, to be clamorous on the side of reform, even of revolution. Less evident are the proceedings of secret societies, which seem congenial to the national mind, and in Chinese colonies have been found by foreign Governments a serious danger to authority.

Signs of a dawning new era, plainest about the foreign settlements and industrial centres connected with them, are very marked at Peking. The destructive commotions of the Boxer war worked wholesome havoc in that jumble of "gilding and filth"; and from the ruins arises a new city, where the old style of building gives way to a more practical architecture. The muddy and dusty roads are improved, on which rickshaws may be seen plying instead of chairs; and cycles or even motor cars cease to be stared at, in the glare of electric light. Public decency is more regarded, under the charge of a police upon European or Japanese model. The city is said to be hardly recognizable by those who knew it in its unregenerate days; and the changes here seem typical of what may soon be going on all over the empire.

The popular opposition to railways is giving way, as the Chinese learn to work the mines of coal and other minerals in which their country is rich. The railway making interrupted by the Boxer disturbances has been carried out, and other lines are being more or less actively pushed on. Not to speak of the first railways laid down for the convenience of foreign settlements, from Peking to the commercial centre, Hankow, is now open a line crossing the Yangtse Kiang on a

bridge of over a hundred spans, the longest, but one, in the world. Northwards, the rail to Mukden connects through Manchuria with the Trans-Siberian line, so that one can now travel at ease from Paris to Peking. A shorter route would be by a Chinese line opened from Peking as far as Kalgan, making for Urga in Mongolia, perhaps eventually for Lake Baikal. A line from the Kowloon territory, opposite Hong-kong, going to Canton, is next to be continued to Wuchang, while another line to Hankow will connect Canton with Peking; and one up the Yangtse Kiang from Hankow will meet the difficulties of navigation against the rapids of the great river. Nanking is already joined to Shanghai by a rail, designed to go farther inland. From the German settlement Tsingtau, on Kiaochow Bay, a railway reaches the provincial capital, Tsinan, and should connect with one from Tientsin to Nanking. In the south, a French line comes from Tongking to Yunnan. China has now more than twenty thousand miles of telegraph wires, linking her principal cities, where such a convenience is no longer looked upon as heaven-provoking hocus-pocus of the "foreign devils".

The fact of these enterprises having been at first carried out by foreigners did not recommend them; and China begins to show natural impatience of what may still be necessary help in the development of her own resources. The more enlightenment and instructed patriotism grow, the louder will be the cry of "China for the Chinese", to which only the selfishness of foreign powers should be deaf, till perhaps pushing intruders learn how this people is not to be despised. Even if China be not roused to a sense of her own strength, it appears that conquering Japan has the will to be her champion against foreign aggression for the future. But here again presents itself a cloud of uncertainty, for the intentions of the Tokio Government towards this big neighbour are not so clear as the manner in which Japanese traders and manufacturers make themselves at home in China, where, for all the ties of racial sympathy, they seem as much detested as other foreigners; and it may prove that, after lending an efficient hand to regenerate China, Japan will find how it has raised up a Frankenstein's monster on its own borders.

China is not so far gone in sleepy conservatism but that it has plenty of active and hardy manhood to make the stuff for victories both of war and peace, if its people could but find and follow such leaders as have won success for the islands of the Rising Sun. Meanwhile "Hands off" is Japan's hint to the Western nations, who have to content themselves for the present with a scramble after a larger share of China's commerce, into which the Japanese keep on pushing themselves with masterful activity; and the power that once took a lead in her compulsory teaching stands now in some apparent danger of being shoved aside from what Britain, for her part, would hold as an "open door". Our prestige, once so high here, seems now to depend on our alliance with Japan. Then among discordant guesses at the future, more than one writer foresees how "China is shortly to become so formidable that her voice will be the voice of the master who has many old scores to settle up".

The Chinese dependencies also have not failed to feel the shock of twentieth-century events, which may indeed expend itself with little effect on the desiccating deserts of Turkestan and Mongolia, though there, too, the growing Russian influence must have been checked. Tibet seemed to be more closely welded to the empire, after the British inroad of 1904, when our retreat from Lhasa is said to have been taken by the ignorant people as a sign of weakness. The Dalai

Lama, who so readily left his flock a prey to khaki wolves, sought refuge in Peking, and again in India from the advance of a Chinese army. But when China had more openly assumed the government of Tibet, its own revolution raised an echo at Lhasa, where the troops mutinied, the Amban withdrew, and the Dalai Lama returned to head a stand for Tibetan independence. In what at present seems a state of civil war, forecast is difficult here; and Mongolia also may prove hard to fit in to China's new constitution.

Manchuria has been handed back to China, after a military occupation in which the high-handed Russians took no real hold on the life of the people. The monuments of that intrusion are the fortifications of Port Arthur, the harbour of Dalny, that now takes the Japanese name Dairen, and the new town of Harbin (or Kharbin) grown huge as the knot of the railway in which Russia's part, at the south end, is transferred to Japan. The Liaotung peninsula, that original bone of contention, has been "leased" to Japan, whose Governor has his headquarters at Port Arthur, where a Museum makes an illustrative exhibition of the late war. With such a stimulating copy forced upon it, Manchuria may begin a new page of activity in the exploitation of her great resources by a robust population. China has agreed to open a number of free ports in this recovered dominion; and already the new-named Dairen threatens New-chwang, whose river-mouth harbour is no longer the only gate of the Chinese Scotland's commerce. Dairen, with 60,000 people, hotels, tramways, and electric light, counts as the terminus of the South Manchurian railway, which has short branches to Port Arthur, to Ying-kou opposite New-chwang at the mouth of the Liao, and to the Fu-shun coalfield east of Mukden. From Mukden also runs a line to Antung at the mouth of the Yalu, where a ferry connects with the Korean rail at New Wiju. From Chang-chun, junction of the Russian and the Japanese sections, a branch is to be pushed to Kirin.

Since the great war, Manchuria has been scourged by a more deadly foe. This land of blizzards, where in winter the people are glad to sleep over warm flues, engendered in 1910 such a plague as is now looked for in hot regions, but it seems to resemble the Black Death that half-depopulated Europe in the fourteenth century. The insanitary habits of the natives here made a hotbed for its ravages, bravely fought by European doctors often at the cost of their own lives. In the Chinese quarter of Harbin, out of 40,000 people only 4000 were reported as surviving. Statistics, however, are hard to come by in this panic-stricken region. The Japanese immigrants, thanks to their cleanliness, appear to have been spared; and where Russian officials had control, they were able to check the contagion. Even the Chinese authorities were roused to active steps for stamping out this visitation, the extinguishing of which is a credit to modern medical science and devotion.

The adjacent Korean peninsula, at first "protected", is now formally annexed by Japan, whose regenerating rule does not please the people, for, with all their courteous bearing, the Japanese have a very forcible manner of getting their own way; and it looks as if they dealt rather roughly with the thin-skinned flabbiness of Korea. This country's outworn dignity entitles it to be treated apart; and some account of it will make for us a stepping-stone from China to the island empire that in one generation has so emphatically given the lie to our ideas of "the unchangeable East". Both in Korea and Japan changes are going on too rapidly to be followed in this account.

KOREA

When poor Korea became a tug-of-war between two strong neighbours, each equally interested to prevent the other's domination here, we hardly could tell whether to treat this country as master of its own destinies. Till recent times it was, in some sense, dependent on China, of which it might be called a miniature edition. It resembles China in its rusty civilization, in its absolute monarchy and oppressive official caste, in its mixture of religions, in its political decrepitude, to a considerable extent in its productions; and it has surpassed China in the pig-headed conservatism that earned for Korea the title of the "Hermit Kingdom". Even from China it was long cut off by a zone of artificial wilderness which came to serve as a camping-ground for robbers; while till a quarter of a century ago its ports remained fast closed to foreign trade. From Manchuria it is separated by the river Yalu, higher up known under another name, but this one has sprung into sudden familiarity through newspaper reports of important military operations at its mouth. On the north, the shorter Tumen is its border towards Siberia.

This mountainous projection from the Manchurian coast has an area of at least 80,000 square miles, and a population estimated from 10 to 12 millions. Its backbone range is abrupt on the east side, but on the west slopes more gently in fertile plains and valleys, watered by rivers that drain away a heavy rainfall. Off the south and west coast lie clusters of innumerable hilly islands, vaguely spoken of as 10,000 in number, many of them inhabited and cultivated. One group of these, Port Hamilton, to the south, was for a time occupied as a British naval station. Farther south, the large island of Quelpart, with a population of some thousands, rises to a highest point of 6700 feet, overlooking the strait between Korea and Japan. The whole country till lately has been little visited, except by bold missionaries, or, so far as regards the coast, by navigators who have here affixed English and other map-names to add to a confusion brought about by the use of Chinese and Japanese as well as native nomenclature for the points least unknown to the outside world.

The Koreans, thanks to their upland country and temperate climate, are a physically fine race, sometimes recalling European types, and believed by some ethnologists to show a Caucasian strain in mainly Mongol blood; but they have fallen into a shiftless and spiritless state that hinders the development of their resources. For their strong point, they show courteous manners to strangers, in whose service they are bound to turn out at night, lighting the traveller from stage to stage of his stumbling way; but, in spite of such politeness, they seem to have chiefly impressed foreigners as figures of fun. They are divided into castes, at the head of which the nobles and officials

take the cream of the land. The late sovereign, long on the throne, was credited with good intentions, bound hand and foot by custom and corruption, a slave to favourites and concubines, yet on the whole proving not obstinately hostile to the reforms forced on him from without. In the summer of 1907 he was forced to abdicate in favour of his son, as not having proved compliant enough for the Japanese, whose high-handed control has since proclaimed itself an annexation, helplessly resented by people and princes of this feeble country.

"Most Korean affairs are conducted with a pomposity and grandiloquence only equalled by their insignificance," says Mr. Henry Norman, who not many years ago could describe an army review here as "a sort of cross between Swedish gymnastics and the soldiers of a Drury Lane pantomime", and the Korean navy as consisting of "half a dozen 'Admirals' who know no more about a ship than a Hindoo knows about skates". The most formidable warriors

Travelling Party, Korea. From a photograph by Mrs. Bishop

of the country appear to be its tiger-hunters, who in winter are able to attack their half-frozen enemy with knives and spears. But by most Koreans, especially by the upper class, hunting is considered as a servile occupation. The nation has been so long dependent and socially enslaved that a once manly people have grown effeminate. The Japanese have lately seen well to disband the native army they began to train out of semi-barbarous parade into a body uniformed and drilled upon European models; but the warriors of Korea have long had no chance of trying their prowess against any foe, and by both parties in the recent struggle this force was neglected in a manner that hints at their estimate of its efficiency.

The Koreans are a very modest people, who have been sadly shocked by the sight of European sailors bathing in the sea; but they themselves would be much the better for more use of soap and water. Their habits often strike

House-building in Korea. From stereograph, copyright, Underwood & Underwood, London and New York

us as filthy and even indecent; and the diseases that flourish most among them are those rooted in dirt. The favourite colour for their own long robes is white, which in the cities it is a point of respectability to keep clean, so that "a street full of Koreans suggests the orthodox notion of the resurrection"; and among a great variety of imposing headgear are noticeable the black hats of woven horsehair, in pattern, like their long skirts, recalling the figures of Ham, Shem, and Japhet of a Noah's ark; but when in mourning, they obfuscate their faces with what looks like the thatch of a small haystack. In wet weather they cover their clothes with waterproofs of yellow oiled paper; and, as in China, those who can afford to coddle themselves will guard against the cold by layers of padding or covering.

The women of the better class are expected to shrink from the sight of a man; in the capital a certain hour of the evening is given up to them for going about, when men are supposed to keep out of the way. Morals seem to be sadly corrupt; but marriage is so far held in honour as to be entered into in boyhood, a rite giving the status of a man, when the youth for the first time may twist his hair into a top-knot and put on a hat, while a Korean bachelor remains a child all his life in the eye of public opinion. Women enjoy little respect, unless through their useful activity in domestic life. One class of them is held in practical slavery. Another, the *gisaing*, are ministers of pleasure, like the *geisha* girls of Japan. The sex would appear to have small skill in one homely accomplishment by which their family tyrants might be propitiated: cookery is not much in esteem among them. We are told that most Koreans eat greedily of anything they can get, and in consequence suffer much from indigestion.

The ornamental arts that once flourished in Korea seem now to be hopelessly decayed for the most part, an exception being skill in the making of artificial

flowers. The houses are mostly flimsy thatched structures of wood and paper, only great men being allowed the dignity of a tiled roof. The Koreans have a speech and alphabet of their own, but educated people affect the use of Chinese ideographic characters, which, to the eye if not to the ear, make an international language for the Far East. As to religion, like the Chinese, the Koreans have a choice of three old forms of belief. Confucianism was long ago imported with Chinese literature, while Buddhism, by its educational activity, is now the most active faith, and the mass of the people seems content to abide by the demon worship of their native Shamanism. This eclectic attitude did not prevent a hot persecution of the Christian missionaries who have been at work here for several generations. About half a century ago there arose a new native body, whose enthusiastic founder, a learned Korean named Tchoi-Tchei-Chou, blended Christian with Eastern ideas in a form of monotheism that made many disciples. Under the name of Tonghaks, they shared the popular opprobrium and official persecution of Christianity. The harshness shown towards them brought about an insurrection, to put down which Chinese troops were called in, an interference that precipitated the quarrel between China and Japan, and threw Korea into its present vassalage.

This peninsula is in a state of such rapid transition, that one hardly knows in what tense to speak of its characteristics. The new wine of civilization which is bursting old bottles has chiefly been imported by way of Japanese influence; and Korea's present masters threaten to drive Western nations out of the profits of Korean commerce, as developed by the reformed conditions of the country. One Briton, however, took a prominent share in Korea's improvement, Sir J. M'Leavy Brown, who, as administrator of customs, played much the same part here as Sir R. Hart in China. Thwarted, threatened, and opposed at every step by prejudice or interest, he had a most difficult and even dangerous course to steer, but held his way onward through the troubled waters of Korean politics with a devotion to duty that will give him a place in history, while if ever he published an account of his experiences, the story could not fail in moving incident. He and the Japanese governors who ousted him are understood to have been backed by but few native officials capable of recognizing the real good of their country. The emperor favoured, or was forced into, a course of reforms, accelerated by the Japanese, who have found it no easy task to purge such a government from the corruption that clogs its ill-adjusted machinery. The cruel punishments in which Korea followed Chinese example are abolished under a firmer and fairer system of justice. The old currency, as in China, consisted of debased cash, of different values and sizes, a pony's load perhaps coming to a dozen or twenty dollars. This is replaced by nickel and copper coinage of Japanese *yen*, still much liable to counterfeit debasement, as the smuggling in of bad coins makes a profitable enterprise. At the ports Japanese notes are in circulation; and foreign silver is more willingly received than Korean money. In 1900 Korea joined the Postal Union, a national service of posts and telegraphs having already been introduced. When the war began, a railway was in construction, designed to cross the country from Wiju at the Yalu mouth to Fusan on the opposite side of the peninsula. The main line, finished by the Japanese, has a branch to the port of Chemulpo on the west side from Seoul, the capital, lying an hour or so's journey inland; and other lines should soon be exploiting the mines and crops of this reviving country.

This city, of perhaps 200,000 inhabitants, stands on the Han river, in much the same position as Rome's in Italy, to which the features of Korea bear a certain resemblance. It formerly had two wide streets through a labyrinth of innumerable smaller ones, poverty-stricken in aspect and unpleasant in odour. Sir J. M'Leavy Brown inspired an enlightened minister to undertake the sweeping out of this Augean stable, which in a remarkably short time has been cleansed, aired, and partially rebuilt, chiefly still in the native architecture, though more substantial houses begin to make their appearance. Seoul is said to be fifteen

View of Seoul, from the South Gate. Roman Catholic Cathedral and American Church in distance
From stereograph, copyright, Underwood & Underwood, London and New York

miles in circuit, but much of the space is unoccupied, as if the population had fallen off. Captain Casserly, one of its latest visitors, describes it as "surrounded by high embrasured walls, pierced by tunnel-like gateways surmounted by square or oblong towers with double roofs and wide-spreading, upturned eaves similar to those of the Chinese capital. Indeed, the place is practically a smaller and cleaner Peking, and the whole land shows traces of the Chinese conquest. From the broad main streets, lined with one-storied houses bordered by deep, open drains, branch off narrow, evil-smelling lanes and alleys. The buildings, both public and private, are all of the Chinese type of architecture, the tiled roofs and the upturned eaves being strongly reminiscent of the Celestial Kingdom. To our surprise, however, we saw a single line of rails leading out of the

gate by which we had entered, and, as our 'ricksha' coolies ran us along inside the city, an electric tram-car flashed down the street." Travellers may well stare to find here such a late product of civilization, the appearance of which in Seoul caused a riot among the superstitious natives.

Western influence is still more apparent at the port of Chemulpo, where tall factory chimneys rise beside its quays, and regular, well-built streets lead up to stone villas with slated roofs, belonging to European and Japanese merchants. On the other side of the peninsula Fusan owes its importance to having been a Japanese garrison, the recognized foothold of Japan in Korea across a strait some 200 miles wide. More than 16,000 Japanese live here, many of them engaged in fishing. Unfortunately it is rather the scum of Japan that has been attracted to these treaty-ports, which does not make for friendly amalgamation, nor for moral improvement. Of other open ports the chief seem to be Wiju at the mouth of the Yalu, and the mainly Japanese settlement Wonsan (alias Gensan) below Port Lazaref, a deep inlet of Broughton Bay, one notably fine harbour of the east coast, which else is not well provided in this respect, being much less broken and indented than the other side. Ping Yang (40,000), north of Seoul, seems the largest of the inland towns of Korea's eight provinces.

The trade of Korea by no means represents the wealth the country might be made to yield, but of late it has increased, thanks not so much to native enterprise as in part to the troubled state of China and the demand for grain brought about through its invasion by foreign armies. The chief exports are beans, rice, ginseng, hides, paper, and gold, this last said to be abundant in the country. Hemp and millet are largely grown for the making of coarse cloth. Ginger is a good deal used instead of tea. Rice is the staple of life; but other grains and vegetables, especially pulse of many kinds, are much eaten. The country is often bright with flowers; while nuts seem to be the most flourishing fruit. Another kind of product is chillies and the bean that flavours soy sauce. The seas swarm with fish, of which the Koreans are too lazy to make a good harvest. Their most active traders are the Japanese, settled in the country by thousands, while Europeans as yet may be numbered by tens. Roads through the interior are usually bad, and bridges over the many streams often wanting or mere makeshifts; but travellers speak well of the industrious ingenuity shown by the peasantry in turning to profit every shelf and hollow of their rugged land, whose mineral wealth begins to be exploited by foreign enterprise.

In past times Korea was tributary to Japan as well as to China, and she made long a bone of contention between these rival patrons. It was the Japanese that first forced open her ports; then the Korean conservatives looked to China's congenial obstructiveness for support, while the progressive party turned naturally to regenerated Japan. Repeated attacks on the Japanese Legation at Seoul brought about active interference on the part of Japan, and China plunged into the war of 1894, that ended in such rapid and decisive defeat. Korea now lay helpless before the conqueror, when Russia stepped in to warn off Japan from the fruits of her triumph. And so Korea, for the moment, stood independent, her weak government propped up by the rivalries of these two powerful neighbours. The result of the Russo-Japanese war has made her a dependency of Japan, whose high-handed reformation stirred feeble patriotism to assassination of her administrator, Marquis Ito. As spoil of victory, Japan also holds Port Arthur, at the point of the neighbouring peninsula.

JAPAN
BY J. G. BARTHOLOMEW, F.R.G.S.
English Miles
Ports open by treaty to Foreign Commerce are underlined
Railways thus
RUSSIAN TERRITORY
MANCHURIA
Peter the Great Bay
SEA OF JAPAN
PACIFIC OCEAN
YEZO (Hokkaido)
NIPPON
HONDO
SHIKOKU
KIUSHIU (Saikaido)
Sado
Oki Shima
Tsu-shima
Hakodate
Akita
Morioka
Sendai
Niigata
Tokio
Yokohama
Kii Channel
Bungo Strait
Tanega Shima
Yaku Shima
TAIWAN (FORMOSA) On the same Scale.
FORMOSA STRAIT
Pescadores
John Bartholomew & Co. Edinr.

JAPAN

OLD AND NEW

The word Japan seems to be a curious corruption of the Chinese form of Niphon, "Land of the Rising Sun", the proper name for a compact group of islands that, lying off the eastern coast of Asia, bear to it much the same relation as the British Isles to Europe. The main island, Hondo or Honshiu, is incorrectly marked as Niphon on our maps. Separated from it by the narrow Inland Sea, on the south are Shikoku and Kiushiu, while on the north another strait cuts off the pointed mass of Yezo. This central group, a little larger than Britain, is continued to the south by the Loo-choo Islands, and by the outer chain of the Bonin Islands, to Formosa, which became Japanese territory as spoil of the

Photo, I B Blow

Japanese Children

war with China; then, by smaller islands, this is connected with the Philippines. On the north the Island of Saghalien was for a time given over to Russia, in exchange for the Kurile Islands stretching to the southern point of Kamschatka. In all, the Japanese empire consists of some thousands of islands, large and small, which are the tops of a chain of submerged mountains rising out of the sea, many of them extinct or active vents of the long line of volcanoes that fortify this side of the world with their subterranean batteries. Igneous action, however, appears not to have been the main factor in the formation of what may be called a gigantic reef raised off the Asian coast.

The predominant inhabitants of this country are clearly of a Mongol stock, as shown by their flat faces, almond-shaped eyes, thin beards, and yellowish skin;

but it is not so clear how they came by certain modifying characteristics which may point to ancient intercourse with distant islands of the Pacific. Some ethnologists, indeed, judge it needless to look farther for an admixture than to the primitive race of Ainus, noted for the hairiness both of their heads and bodies, who have been driven to the north, and still form a distinct element of population in Yezo, Saghalien, and the Kurile Islands.

The original religion of the Japanese was that nature and ancestor worship which has survived under the name of Shintoism. This became overlaid by Buddhism, introduced from China through Korea in our sixth century, bringing with it, or following, the Chinese literature and civilization that then set their stamp on Japanese development. Among the educated class Confucian philosophy also has had an influence through the study of Chinese classics. Buddhism, with its northern corruptions, soon grew to be established as the national creed, yet without abolishing Shintoism, a cult of such modest pretensions as to leave room for a *modus vivendi.* Buddhism itself has here been differentiated into various sects that, while derived from the Tibetan branch of this faith, have not much imported its praying-wheel machinery of devotion. The simple Shinto temples, where a mirror or a wand topped by paper cuttings are the most striking emblems, will be reverenced by worshippers ready, on occasion, to turn to the more gorgeous rites and imposing images of Buddha, as in England chapel-goers may prefer the marriage or funeral services of the parish church. The same temple sometimes serves for both creeds. Religion seems to be taken somewhat easily by the Japanese, whose strongest sentiment is a fervid patriotism finding an object of worship in their hereditary sovereign, held to be sprung from legendary gods.

No other country ventures to boast of a dynasty twenty-five centuries old. The throne of China may be still more ancient, but this has all along been "a cemetery of empires", as a Japanese writer retorts. The first ten centuries of the Japanese empire, however, seem as fabulous as other prehistoric annals. It is not till the early centuries of our era that this power takes a solid shape, resisting attempts at conquest from the mainland, and even claiming tribute there from Korea. In mediæval days we have glimpses of hot civil wars, through which the government became welded into a peculiar form. The emperors by right divine fell into the background as secluded objects of adoration, while real authority was in the hands of a successful soldier, like the French "Mayors of the Palace", who here bore the title of shogun, the legitimate sovereign being known as the mikado. The *fainéant* dynasty persisted in its sacred retirement through all commotions, among which the shogun's power long waxed and waned with the personal force of the holder and the circumstances of his age. More than once it passed from one great family to another, these rulers always having to reckon with the proud and turbulent feudal nobility of *daimios*, who in their strong castles, surrounded by their vassal *samurai*, scorning all pursuits but warfare, played much the same part as our mail-clad barons and knights. Down to the birth of new Japan, half a century ago, such swashbucklers strutted in cumbrous armour, as badge of their gentry proudly wearing two swords which must never be unsheathed without bloodshed. In these palmy days of Japanese art, scenes of reckless violence must have been common as in Benvenuto Cellini's Italy; and the empire was often thrown into turmoil by the rivalry of great clans, which still exercise considerable influence in Japanese politics.

When, in the sixteenth century, after the first vague reports of Marco Polo and Mendez Pinto, Japan began to be known in Europe, the country had fallen into anarchy, presently bridled by a succession of strong dictators, whose power suggested to early missionaries the long-received account of two emperors, one temporal, the other spiritual. The shogunate, for a time like to dwindle in its turn, at the end of the sixteenth century became settled in one family, whose founder broke the power of the barons, degrading them into courtiers and ministers of his own authority. This masterful usurper, Iyeyasu, was a patron of literature, which, as well as Japanese art, now entered on their Augustan age under the firm government of his successors, duly invested by the mikado, and taking for themselves the title of tycoon. In Iyeyasu's reign England came into touch with Japan through the pilot William Adams, who for twenty years, though honoured and rewarded, remained an unwilling captive in Japan; his letters being our first account of a country for which he was a pioneer among the European advisers that have done so much to transform it.

Photo T. B. Blow

Samurai playing Flute for Alms.[1]

Meanwhile Christianity, introduced into Japan by St. Francis Xavier, had been at first tolerated and in many parts welcomed, so that in half a century converts were counted by hundreds of thousands. But about the end of the sixteenth century, when Europe was aflame with religious hatred, quarrels between Spanish and Portuguese Christians, between Catholics and Protestants, and their alleged intrigues with discontented Japanese, excited the suspicion of a despotic shogun. A fierce persecution followed, in which the cross was trampled under foot, but many of the converts held by their faith to cruel death, and a remnant of the Church survived obscurely through all sufferings. Next the shoguns shut the country against all Europeans but Dutch traders, allowed to visit one port only. At the same time the people were restricted from going abroad, though a certain amount of commercial intercourse seems to have been kept up with China and Korea. Foreigners landing without leave were liable to imprisonment, as the Russian Captain Golovnin found in 1811. In this state of almost complete isolation Japan remained for more than two centuries.

Behind the veil that so long hid these islands from Europe a movement of

[1] When the feudal system was abolished in 1871 the *Samurai*, or fiefs of the *Daimios* (nobles), found great difficulty in obtaining a living, as they looked down with some scorn on trading. Many when reduced to extreme need played the flute from house to house for alms, always keeping their personal identity concealed by means of a large basket-like hat.

mind seems to have set in, which, beginning as a reaction, strangely changed its course to burst out as a revolution. The Japanese, when at peace to indulge a mood of sentimental conservatism, looked regretfully back on what they took for their golden age, from Buddhism to Shintoism, from the shogun to the mikado. They could hardly have known what they would be at when in 1854 an event happened which they now count as the birth of new Japan. The American Commodore Perry, appearing off the Gulf of Yeddo with a fleet Japan was in no state to resist, pressed upon her a treaty of commerce. Other maritime powers quickly followed this lead, and Japan, like China, was driven into opening treaty ports to European trade. The first effect of contact with foreigners was an irritation which led to bloodshed; then, finding, as China had found, that they were helpless against foreign arms, the Japanese turned their dissatisfaction against their own Government. As in the French Revolution, the shogun or tycoon appears to have hurried on his own downfall by calling a national assembly into council. Civil war broke out, ended in 1868 by the shogunate being abolished and the mikado restored to absolute authority.

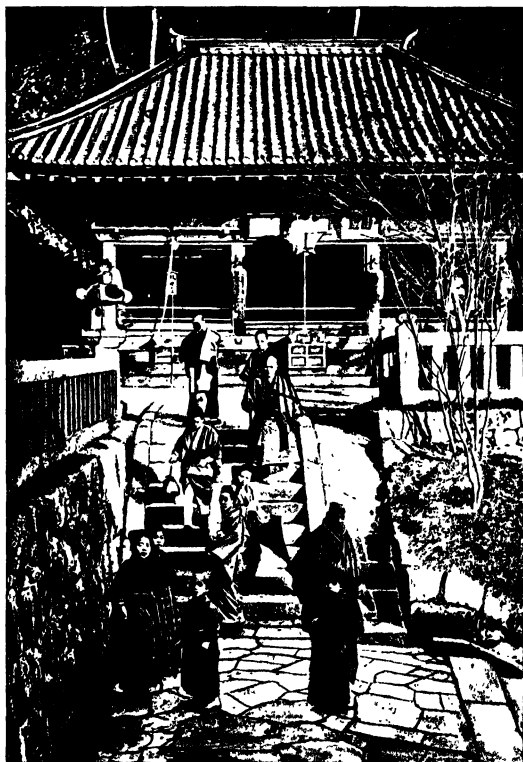



Photo T. B. Blow

Approach to the Kyomidzu Temple, Kioto

Soon ensued the puzzling right-about-face in this patriotic movement. Kindled by anti-foreign feeling, as appears, its force came to explode in the contrary direction to what might have been reckoned on. From their mood of regret for the past the Japanese passed suddenly into an enthusiasm of radical reform. Unlike the Chinese, they showed the sense to recognize their own deficiencies, and willingness to learn even from an enemy. Under the nominal despotism of their emperor the leading spirits set about reorganizing their country upon European models. The feudal domains of the daimios were changed into prefectures administered by responsible officials. Buddhism was disestablished. By an impulse of renunciation recalling the *philosophe* aristocracy at the

A SCENE NEAR YOKOHAMA, JAPAN

The Japanese king of flowers is the chrysanthemum, but next to it, in Japanese affection, comes the abundant "cherry-blossom", so called, though this plant is rather a kind of wild plum. When its blossoms are out in April, city folk flock to the suburban avenues, then blooming with a glow of pink and white that "seems to have caught the sunset clouds of a hundred skies". The scene here depicted beneath the cherry-blossom suggests the lighter and brighter side of Japanese life, even near to such a busy seaport as Yokohama. "The natives", according to one writer, "seem to be always gossiping, free of cares, almost frivolous, but still courteous, and this is as true of the sturdy porter as of the pretty waitress in the tea-house."

SCENE NEAR YOKOHAMA, JAPAN

outbreak of the French Revolution, the nobles are said to have given up their feudal power and the greater part of their property; in part, no doubt, such a sweeping change was forced upon the unwilling. Hereditary privileges were restricted, and degrading disabilities removed from the lowest classes. Posts, telegraphs, and railways were introduced. Religious toleration was proclaimed. The European calendar was adopted, European dress encouraged, European science eagerly studied, especially as bearing on practical matters. Progress was consolidated by a system of national education in which the English language took a prominent place; this, as regards the elementary stages, is free and compulsory. A crop of lawyers was raised on this virgin soil. Doctors were trained in European schools. The codes of European states were compared and adapted for a Japanese system of legal procedure. European officialism was imitated, as were our orders of knighthood. The nobility was recast under titles answering to our duke, marquis, count, viscount, and baron, highest rank being given to the hitherto obscure princes of the imperial family. At the same time a political career was opened to talent. When Japan advanced far enough to have radical agitators and opposition newspapers to silence, in 1889 the emperor granted a long-promised and eagerly-demanded constitution, by which an elected diet of two houses became the main machinery of government, while minor authorities were entrusted with the administration of local affairs. So amazing a transformation, from being one of the most conservative to the most progressive nation in the world, took place in the life-time of a single generation, at the opening of which it was death to own a foreign book, and Marquis Ito, the great Japanese statesman, had to begin his career by smuggling himself on a foreign ship that he might gain that knowledge of civilized countries now held in highest esteem.

This rush of innovation has not been altogether steady, fever fits of attraction to foreign customs being succeeded by chills of patriotic repulsion. On the whole the Japanese have sensibly gone to school with other nations, and not less sensibly declined to be dictated to once they came to learn the lesson they sought. So long as they needed instruction they imported foreign teachers, who, as soon as possible, were replaced by their own pupils; and they bought foreign goods only till they were able to make them for themselves, even if not quite so well. Promising young men sent abroad to study foreign crafts have grafted their knowledge with such effect that Japan is now quite independent of outside help. She did not blindly commit herself to any master, but took time to pick and choose among different patterns, adapting her criminal procedure mainly from France, her army from Germany, her navy rather from England, her educational system from America, and so on, not without in each case taking a hint from other quarters. On the whole, perhaps, Germany, coming to the front of European affairs at the right time, has furnished the chief model, as seems not unfair when we remember that to the German writers, Kæmpfer, Von Siebold, and Rein, Europe long owed its knowledge of Japan.

The experiment of parliamentary government has not been as yet a brilliant success, but twenty years are perhaps too short a period for sowing constitutional wild oats. In 1894 the working of Japan's new armament was tested in a short struggle with China, preluding an exhibition of the former's strength as formidable even to better-equipped powers than the decrepit Celestial kingdom. The indemnity exacted from China was used by Japan to introduce a new gold standard for her coinage, which, issued also in paper, silver, and nickel money,

has for its unit the *yen* or dollar, equal to about 2*s.*, divided into 100 *sen* or farthings, with smaller decimal denominations existing only in the minute calculations of a frugal folk. The navy now numbers over a hundred ships of war. Universal obligation of service would readily give the army a potential strength of a million. Nothing was more admirable in its late exploits than the efficiency of a medical department that set copies to Europe. There are millions of children at school, and University graduates by hundreds of thousands. And as a crowning proof of civilization, Japan has been able to borrow largely on terms showing how high stands its credit.

Flushed by its victory, and convinced of its strength, Japan was encouraged by the Chinese war in revolt against the attitude of patronage taken towards her by European nations. Treaties entered into in her infancy as a civilized state recognized foreigners as amenable only to consular jurisdiction, and took away from Japan the right to fix her own customs duties. Here was a natural grievance which for years made "treaty revision" the burning question of Japanese politics. Delays and attempts at compromise so inflamed popular feeling that at last the treaty powers gave up attempting to hold such a power in leading-strings. The end of the century saw Japan set free from the restrictions forced upon her by selfish schoolmasters. She now takes her place on equal terms among civilized nations, and it remains to be seen what depth of earth is beneath the civilization that has sprung up with such unexampled rapidity, and whether she has been well advised in recasting her old life. As to her powers of defence and offence, the war with Russia leaves that question out of doubt.

THE JAPANESE EMPIRE

Its insular position, its broken shores, and its extent over nearly thirty degrees of latitude, from the Tropic of Cancer to the bleak Siberian region, gives this empire a varied climate, which in the compact central group can be called temperate, more genial than that of the opposite Asian coasts, less so than that of corresponding European latitudes. The capital of Japan is about as far from the equator as the south of Europe, but its range of temperature is more like that of England, with less uncertain changes, the wind blowing steadily from north and south in winter and summer. The northern parts of the group are naturally colder, so is the west side, while the outer coast benefits by a warm ocean current from the equator. In general there is a heavy rainfall equal to that of our lake country at its wettest, distributed throughout the year, but chiefly falling in summer, when the humid heat of the lowlands proves very trying to Europeans. In winter rather come these days of clear shining through a crystal air that make the beauty of evergreen Japan, and help the people not to take their cold weather seriously, where, in spite of frost and snow, as Pierre Loti wonderingly exclaims, "the palm-ferns grow all the same, the bamboos become as large as trees, the grasshoppers chirp from one end of the year to the other, the chilly apes contrive to live in the woods, the country folk go almost naked in the fields, and everybody shivers in paper houses!" Autumn seems to be the finest season, lit up by the glorious decay of the maple and other deciduous trees. Spring comes on early, but a bright show of buds and blossoms is often mocked by the chilly air.

The greater part of the country is ruggedly mountainous, and its torrential streams, now trickling through beds of sand, now raging in far-spread inundation, are apt to ruin rather than to nourish their banks, and to choke up their mouths by the detritus hurried down on every flood. The Shinano, the longest river (under 200 miles), goes on piling up a bar across its mouth, and many other harbours are blocked like the little leas of our Devon coast. In some parts, like the Po and its tributaries, these turbid streams have actually banked their beds above the plain, so that in Japan a railway may have to be tunnelled under a river. Railways and roads are liable, during the hot clouded summer, to be overwhelmed by days of continual deluge washing down huge landslips into the

Fuji-yama. From a Japanese photograph

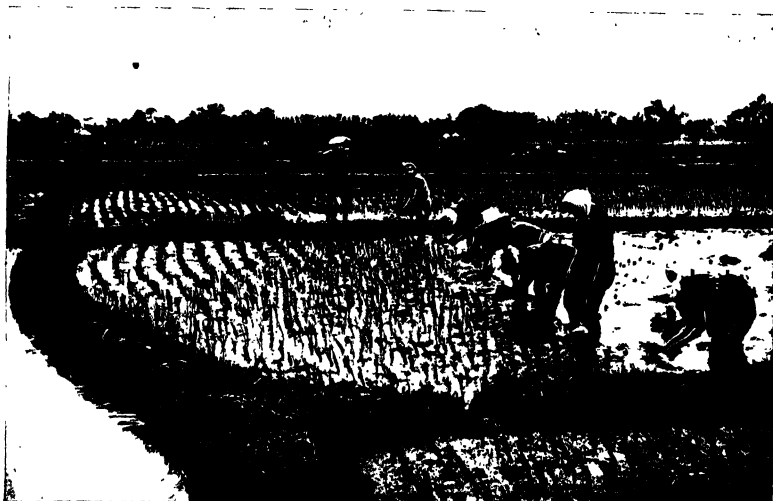
valleys. Mrs. Bishop, better known to her old readers as Miss Bird, tells us how one day she travelled in a light, steady rain that thickened to streams, and then to sheets, under which "rocks were rent and carried away trees in their descent; the waters rose before our eyes; with a boom and roar as of an earthquake a hill-side burst, and half the hill with a noble forest of cryptomeria was projected outwards; and the trees, with the land on which they grew, went down heads foremost, diverting a river from its course; and where the forest-covered hillside had been there was a great scar, out of which a torrent burst at high pressure, which in half an hour carved for itself a deep ravine and carried into the valley below an avalanche of stones and sand". The islands as well as their surrounding seas are visited by furious hurricanes, when, says Mrs. Hugh Fraser, "it rains ramrods for twenty-four hours, and the barometer behaves as if it had St. Vitus' dance".

By subterranean fire also the country is exposed to formidable destruction. Slight shocks of earthquake are always to be looked for, and severe ones in historic times have made thousands of victims. Japan is dotted with quiescent volcanoes, and by some still active, round which such phenomena as geysers, hot springs, steaming solfataras, and mud vents give grim hints of what forces are

buried beneath. Violent eruptions have of late been rare, at least in the populous parts; but the neighbours of these danger-signals never know what a day may bring forth for them. In 1888 Mr. Henry Norman (*The Real Japan*) visited the scene of a recent eruption, in the centre of the main island, which killed and wounded several hundred people. The greater part of a mountain high as any in Britain had been blown into the air as by the explosion of some Cyclopean boiler, the earth converted by a gigantic escape of steam into boiling mud, which poured over 30 square miles of country faster than the pace of an express train, tearing down with it a thousand huge boulders to be tombstones for unfortunate wretches buried beneath the irresistible flood. From the edge of a freshly-formed precipice half a mile deep the visitors gazed in horror on this far-spread destruction, having already on their ascent had to pick their way among its strange features that in a wider view were confounded into a sea of congealed mud. "In every direction were crater-like holes of different sizes; the trees had been twisted off and split and buried and hurled about; five or six inches of sticky gray mud covered everything; we sank ankle-deep in it at every step, and every now and then, as we still climbed, one of the party would struggle back as he found himself sinking deeper, and shout a warning to the rest to avoid the dangerous spot. Pools of dark-yellow, sulphurous water, small lakes some of them, had been formed wherever the soil was flat enough for water to rest, and of all the bright turf and foliage which had beautified the spot a few days before not a single blade or square inch of green was left. It would be impossible—so at least we thought then—to imagine a completer picture of utter desolation than this gray and stinking wilderness, all the more terrible that the form of landscape was vaguely preserved in it." The largest active volcano on the main island is Asama Yama, which in 1783 was in convulsive eruption for several weeks together, destroying more than fifty villages by its ashes and lava floods. The great earthquake of 1891 is said to have ruined some 50,000 houses, the destruction in this country being much increased by fire, which readily breaks out among the collapse of wood and paper buildings. Nearly all Hondo's peaks are volcanic.

With its varied climate Japan has a large range of natural productions, in the main answering roughly to that of Northern China, including tea, the mulberry, and the bamboo, so valuable to both countries. Here also rice is the chief harvest of the plains; barley, wheat, millet, &c. being grown rather on the high grounds. Such crops as cotton and tobacco flourish best in the southern parts. The forest trees on the main island are chiefly conifers, among them the tall umbrella pine and the magnificent cryptomeria cedars which so often adorn the hill scenery. One of the noblest wild growths is the camphor-tree, which is found measuring 50 feet in girth. Along with most of the American deciduous trees is found one like the Californian redwood in what seems a meeting-place of American and Asiatic vegetation. By far the larger part of Japan is given up to forests, its hills, "smothered in greenery", making four-fifths of the country; but every bit of plain and valley is turned to account by an industrious population, as described by Sir Edwin Arnold. "The typical Japanese landscape, along the southern shores between Kioto and Tokio, is distinctly special to the country, more so than the hill regions, which remind you of many other wooded and mountainous districts until you note the vegetation closely. Wide flats of land, either levelled by alluvial action or carefully laid out in terraces along the whole course of a valley, are seen marked off in regular squares and oblongs for rice and

other moisture-loving crops. These are kept almost perpetually under water, divided by narrow banks of earth where the cultivators can just pass in single file; and in winter they present a rather dreary vista of gleaming swamps and black rice-roots. . . . Overhanging the rice plots are generally hills covered with groves of bamboo, fir, paulonia, and beech, with long glens running into them, which are all terraced for rice and wet crops. At the foot of the hills, or in single long streets on either side of the main road, running beneath them, gather the villages, all on the same model, except that the ridge of the thatched roof, perhaps, will be differently fashioned in different localities."

Almost every house has its garden or orchard, the cultivation of fruit and flowers being a passion with the Japanese. As in China, their bits of pleasure-

Planting Rice. From a Japanese photograph

ground are often laid out in the willow-pattern-plate style, with tiny streams, toy lakes, and artificial wildernesses, bridges, rockeries, clipped hedges, and the monstrosities in the way of dwarfed trees, which they have the art of shrinking like Alice in Wonderland. A story is told of a fir-tree, a bamboo, and a plum in blossom, contained in a box 3 inches by 2; and gnarled forest trees may certainly be seen reduced to fit a flower-pot. Their king of flowers, on the other hand, the chrysanthemum, is often grown to the size of a tree, with blossoms bigger than a sunflower, of varied colours, nursed sometimes by patient growers into most extraordinary shape and size. A representation of this flower is the imperial crest, closely resembling the national device, the rising sun, that as a red-rayed circle figures on flags and public buildings. Next to the chrysanthemum, in Japanese affection, comes the abundant "cherry blossom", so called, though this plant is rather a kind of wild plum. When its blossoms are out in April, city folk flock to the suburban avenues blooming with a glow of pink and white that "seems to have caught the sunset clouds of a hundred skies". Other notable

blooms are the blue iris, running wild as a weed on cottage roofs; convolvulus and wisteria, trained in thick bowers purple and white; the camellia, growing like a tree; the white lotus, "flower of death", filling the ditches for miles; orange and scarlet lilies flaming over the slopes as if escaped from a hot-house; besides roses, peonies, and azaleas which make the country so gay in their season. The Japanese cherish a language, a poetry, and a philosophy of flowers not easily interpreted to Western minds. They are exceedingly tasteful in the arrangement not only of flowers, but of blossoms, coloured leaves, mosses, and any pretty bit

Iris Garden From a Japanese photograph

of vegetation, gathered into bouquets or sprays, with which they love to decorate their houses.

The flowers of Japan are deficient in scent, but there is no want of flavour in the fruit. The best native fruit is said to be a kind of persimmon. Others, indigenous or imported, that thrive here are oranges, apples, pears, apricots, plums, cherries, mulberries, pine-apples, bananas, and grapes, linked by melons and cucumbers with the vegetables so industriously cultivated, among which beans, onions, and a gigantic radish a yard or so long, are notable on market stalls.

In animal life, too, the country is rich, though with some notable deficiencies, such as the sheep, the goat, and the donkey, now being introduced; nor are its cattle and horses of much value. The rough grass that grows so luxuriantly is ill adapted for pasture. The pig is not so much at home as in China. In the wilder parts lurk bears, boars, and wolves, but travellers seem to go in less fear of fierce beasts than of swarming fleas, gnats, gadflies, and the ubiquitous

mosquito. The insects of Japan, not yet fully studied, appear to afford twice as many species as those of Britain; "strange long-tailed, long-winged, long-legged things of all colours; paralytic spiders of eccentric shapes, ideal beetles like peripatetic gems, large and unpleasantly persistent flies, hornets big enough and startling enough to appear with success in pantomimes". Birds are abundant, from eagles to crows, both very common. Reptiles are not so numerous, but among them is the peculiar giant salamander, besides mostly harmless snakes. The waters around these islands are said to be richer in fish than any other part of the ocean; and, next to agriculture, fishing is the national industry. The fresh-water fish include Chinese varieties of gold and silver fish, which show the peculiarity of having two, three, or more tails. As domestic pets are cherished tailless cats, and a lap-dog which has recommended his charms to the caprice of dog-loving fashion in England.

The mineral resources of the country are great: copper, iron, antimony, and silver being the chief metals. There are large deposits of coal, also of sulphur in the volcanic regions. Petroleum is found. The kaolin or china-clay, which we export from Cornwall, is more valuable to the Japanese, since they turn it to such good account at home in one of their most characteristic arts.

The area of the empire, excluding Formosa, is about 150,000 square miles, with a population growing over 50,000,000, most of them living in towns, counted by the thousand, and in smaller villages. The main island, Hondo, makes the largest and most prosperous part, itself most thickly peopled on the southern shores of the central mass, from which long spurs project north and west. Most of the land swells up in spreading ranges that, near the southern shore, have their highest point in Fuji-yama (12,400 feet), monarch of Japanese mountains, tapering from a base of 120 miles to that graceful cone, mantled with snow, that so constantly figures, painted or modelled, in the native art. Below this lies a deeply-indented coast of alluvial plains, which makes the richest part of Japan. From one end of the island to the other runs a trunk railway, with branches to the chief towns and seaports off its line. The roads that traverse it are not always good as to construction and surface, but often very beautiful in their bordering of trees, avenues, and gardened villages.

In the south-east corner, within sight of Fuji-yama, at the head of the deep Gulf of Yedo, stands the chief city, Tokio, formerly known as Yedo, when it was the seat of the shoguns; then, after the revolution, the mikado fixed his residence here under the new name, which means "Eastern capital". Its population increases towards two millions; moreover, the mass of low houses is so cut up by rivers and canals, and interspersed by parks, gardens, and temples, that this makes one of the most extensive cities in the modern world, its area being loosely estimated at 100 square miles. Most of it lies on the right bank of a river here debouching into the sea, crossed by a long bridge which is the Charing Cross not only of Tokio but of Japan, as hence distances are measured to all parts of the empire. Repeated destruction not only by earthquakes but by fire spreading among the flimsy houses gives opportunity to open up the narrow and crowded old streets by broader thoroughfares, showing more or less Europeanized architecture, which has been very effectively used in public buildings, that replace the vanishing palaces of the feudal nobility. The main street, the Ginza, has tram lines, side-walks, and shops like a European city, while filled with the medley picturesqueness of the East. In the heart of the city is the Shiro or imperial

quarter, enclosed by massive walls and moats, several miles in circuit, within which, upon a height, rose the citadel of the shoguns, destroyed by fire soon after the revolution. For the mikado has been built a new palace, patriotically planned on Japanese lines, but containing European features and conveniences, such as electric light, artificial heating, and partitions of plate-glass instead of paper. This is seldom seen by strangers, the imperial family still clinging to their mysterious seclusion; but the elaborate gardens are occasionally opened to foreign guests. In or about the Shiro are the chief Government offices and the Imperial University, the centre of that educational system that is transforming Japan.

Tokio is said to contain more than 3000 temples, chiefly Buddhist, the most notable of them in the suburban parks that are such a pleasant feature of this city,

Photo I B Blow

In the Temple Grounds, Asakusa (Tokio)

whose inhabitants willingly unite devotion and diversion. In the Asakusa quarter one of the most renowned temples of Japan has within its grounds theatres, archery shooting-galleries, cock-shies, peep-shows, tea-houses, and shops that keep up a lively fair round the abode of sacred idols. There is here a model of Fuji-yama, 110 feet high, ascended by thousands of holiday-makers; and such exotic features of amusement as switchback railways and roundabouts have made their appearance in the far East. Shiba is another fine suburb, containing temples and sumptuous tombs of the shoguns, who were buried alternately here and at Ueno, to the north of the city, where the shrines suffered much in the revolutionary disturbances, and the chief feature is now a modern building in which, to be quite up to date, Japan proposes to hold an exhibition of her arts and industries every few years. Beyond the suburbs one gets into a rich country of groves and gardens; then an Englishman might here and there fancy himself in a home-county park, in a Devonshire lane, or on the slopes of Richmond Hill.

The river of Tokio, like many others in Japan, is so silted up as to be useless

for a harbour, vessels having to anchor some miles outside, under the protection of batteries upon artificial islands. An attempt is now being made to improve this state of things. Its port, connected with the capital by a railway, is Yokohama, 20 miles down the gulf. Since the opening of Japanese trade, this place, once a mere fishing village, has grown into a city of over 300,000 inhabitants, as the chief residence of foreign merchants, and the harbour at which travellers arrive by several steamboat lines from Europe and America. Naturally it is less a Japanese town than any other, its chief quarter being the settlement, where the "Bund", facing the sea, is lined by the offices, warehouses, clubs, hotels, &c., of the foreign community who have their homes and gardens on an airy height called the Bluff. There is also a special Chinese quarter, crowded with dirty dens of dissipation for sailors, while the streets of the Japanese part abound in shops exhibiting the curios, bric-à-brac, and objects of Japanese art which soon empty the purses of passing travellers unless they have time and patience to bargain with the dealers. This mushroom city has almost swallowed up the neighbouring port Kanagawa, originally designated as the point of commercial intercourse under the treaties; but the intrusive foreigner found a more convenient harbour at Yokohama, which seems likely to keep its predominant place, even now that other Japanese ports are open to trade.

Within easy reach of Yokohama, to the south, is the site of the ancient capital Kamakura, with its temples and treasures often visited by globe-trotters, as are a colossal statue of Buddha not far off, and, farther on, the beautiful peninsula Enoshima, which high tides turn into an island recalling our Cornish Mount St. Michael. By the railway line along the southern coast can be gained Myanoshta, a noted bathing resort to which hot sulphur water comes down from the volcanic outskirts of Fuji-yama, belted by other natural baths and villages that make starting-points for the arduous ascent. Its crater has been inactive for nearly two centuries, but the dread of its ancient eruptions, and its commanding position, consecrate the summit as one of the holiest spots in Japan, to which crowds of pilgrims mount in summer, the zigzag way over loose cinders being marked by their cast-off straw sandals. Making pilgrimages is the popular form of summer excursion, for the furtherance of which the people form associations, like the holiday-trip clubs of our Lancashire workers; but here, according to Mrs. Fraser, the fund subscribed in small sums is raffled for, and only a few favoured by lot get the benefit of it.

The place of pilgrimage that has the strongest attraction for foreigners is the sacred mountain of Nikko, lauded in the Japanese proverb, "Till you have seen Nikko, do not say *Kekko*"—an adjective answering to the *wunderschön* of German picturesque-hunters. This beauty-spot of Japan, a panorama of wooded hills, streams, waterfalls, lakes, and hot springs, brightened in the sunshine by luxuriant flowers and flower-like butterflies, but too often dimmed by heavy rain, lies some way off the main railway running north from Tokio along the eastern side of the island. Till a branch line was made, the last stage had to be done in a carriage or rickshaw along a road bordered for 30 miles with magnificent pines and cedars, which converges at Nikko with a similar one, the two making perhaps the noblest avenues in the world. Their funereal shade forms a fit approach to this mountain village, whose glory is its tombs enshrining the richest work of Japanese art. They are reached by two bridges, the celebrated sacred one, of red lacquer work, having at each end a huge granite *torii* (the

archway which is a feature of Shinto shrines) leading across the stream to the mountain side, up which a steep road winds through dark cryptomeria groves broken by many venerated shrines and sepulchres, chief among them those of Iyeyasu, the masterful usurper who, at the end of the sixteenth century, established the shogunate, and of his grandson Iyemitsu. Under a great torii is entered the Iyeyasu Mausoleum, where by flights of steps and cedar-shaded courts one mounts through a bewildering show of moss-grown monuments, towers and gateways, canopies and pillars, profusely adorned with carvings and bronzes, colour and arabesque, lacquer and mosaic, up to a golden hall that seems the climax of beauty in the richness of its lacquer work. The actual tomb stands still higher, approached by mossy steps, and is a simple monument of bronze, adorned with the stork and the tortoise, Japanese emblems of life. Not far off is the only less gorgeous tomb of Iyemitsu, guarded by two gigantic figures, and within by appalling images of the gods of wind and of thunder. Enthusiastic travellers spend pages in describing the wonders of these mausoleums, which might, indeed, be called museums of painting, sculpture, and carved wood-work. When its details had faded from memory, the sight left on Mrs. Bishop a general impression of "picturesque masses of black and red lacquer and gold, gilded doors opening without noise, halls laid with matting so soft that not a footfall sounds, across whose twilight the sunbeams fall aslant on richly arabesqued walls and panels carved with birds and flowers, and on ceilings panelled and wrought with elaborate art, of inner shrines of gold, and golden lilies six feet high, and curtains of gold brocade, and incense fumes, and colossal bells and golden ridge-poles; of the mythical fauna, *kirin*, dragon, and *howo*, of elephants, apes, and tigers, strangely mingled with flowers and trees, and golden tracery, and diaper work on a gold ground, and lacquer screens, and pagodas, and groves of bronze lanterns, and shaven priests in gold brocade, and Shinto attendants in black lacquer caps, and gleams of sunlit gold here and there, and simple monumental urns, and a mountain-side covered with a cryptomeria forest, with rose azaleas lighting up its solemn shade".

We cannot take our readers to all the Buddhist and Shinto shrines of Japan, nor through all its ports and markets, most of them now connected with the capital by railways. In the northern part of the main island, Sendai, near the east coast, seems the chief place, with a population of 100,000. The most-peopled region is the rich southern coast strip, along which an ancient highway called the Tokiado, as now the railway, joins Tokio to Kioto, the former capital of the mikado. Several considerable towns are passed on the way, the largest of them Nagoya, near the head of the Owari Gulf, which still makes a great commercial centre, and comes fifth in population (288,000), though, like so many other places in Japan, it has lost its harbour through the silting up of the channel.

Kioto, re-christened Saikio, "the western capital", seat of the mikado's idle state before the revolution, is like Canton in comparison to Peking, Moscow to Petersburg, a more characteristically Japanese city than Tokio, and though its population has much dwindled (now about 380,000) since the removal of the mikado's court, it remains a centre of religious and artistic dignity, renowned for its beautiful brocades, its porcelain and bronze work, and as the centre of book publishing. Here a second university has been established on the model of that at Tokio. Besides imposing palaces, it has a bewildering show of temples, one of them said to contain 33,333 idols. In one of these temples the Dutch envoys

used to be lodged when annually admitted to the mikado's presence on the degrading condition of having to play the buffoon for the amusement of his court. The old imperial residence is said to be falling into decay. A more flourishing Japanese institution is a street full of theatres and other places of popular entertainment. Sacred shrines are dotted about the neighbourhood, where excursions can be made to Lake Biwa, the largest in Japan, a few miles off, to Kameyama for the thrilling sensation of shooting the rapids of a river there, and to the picturesque old town Nara, one of whose temples is famed for a colossal image of Buddha, over 50 feet high; then to the south is the shrine of Isé, the Sun-goddess,

Photo Underwood & Underwood

Theatre Street, Osaka

the most revered in Japan. What will more interest some European visitors is that Kioto has a first-rate hotel fitted with electric light and electric bells. Indeed many of the Japanese hotels, where one fares sumptuously for 3 or 4 yen a day, put to shame those of our Indian empire.

The River Yodo and a railway lead southward to Osaka, on the Inland Sea, 33 miles to the south-south-west of Kioto. This, the second city of the empire in size, with a population of a million, is also the principal industrial centre, through its busy cotton factories and its large warehouses that dub it the Manchester, or the Chicago, of Japan, while the multitude of canals that traverse it have suggested the inevitable comparison with Venice. Here are the Japanese mint and arsenal. In 1909 Osaka was swept by a conflagration that destroyed its famous temple of Buddha and 11,000 houses. The Liverpool of this region would seem to be the double town Kobe-Hiogo (285,000), which is also a station of the Japanese fleet, and has a considerable foreign settlement in Kobe, the modern quarter. Hiroshima (122,000) is another important seaport farther west upon the long projection of the main island, facing that beautiful Inland Sea, whose "scenery of a dream", where "abides that most shy and exquisite spirit of

Japan", seems to elude all the epithet-hunting of globe-trotters. Its calm waters are bordered by wooded mountains and yellow cliffs, in some parts half-choked up by countless islands so richly green as to remind Britons of the Lakes of Killarney, while the chalêts and villages nestling upon them have a hint of Switzerland. One of these islets, off Hiroshima, is held so sacred that the soil must never be disturbed by tillage, and its temple makes a great goal of pilgrimage, that most popular rite of religion in the far East.[1]

The Inland Sea separates Hondo from the smallest of the main islands, Shikoku, a mountainous region of some 7000 square miles, whose largest town is Tokushima on the east coast, and Kochi on the south is noted for its great paper-mills. The whole population is about three millions. This part of the country seems little known to travellers, but its wild scenery must be well worth exploring.

Photo T. B Blow

At Miyajima, on the Inland Sea

To the west of Shikoku, separated from it by the Bungo Channel, and by the narrower Shimonoseki Strait from the main island, lies Kiushiu, twice as large as the former, and belted on the outer side by smaller islands, extending halfway across the Korean Strait as the bridge by which Old Japan had its intercourse with Asia. On the west coast is Nagasaki, whose landlocked sound was long the one Japanese harbour open to Europeans, and then only to the Dutch, whose traders were kept aloof upon a walled-in island. Another rocky islet at the mouth of the sound has a tragical interest in the persecution of native Christians, thousands of whom are said to have been hurled from it into the sea. Over the harbour rise the tall chimneys of coal-mines, whose product is put on board ship by lively and active Japanese damsels. Nagasaki is beautifully situated against a background of temple-studded mountains, and has a genial climate, so that it now makes a health resort for foreigners among its population of over 150,000. Other towns on this island, not quite so large, are Fukuoka in the north, Kumamoto in the centre, and Kagoshima in the south, an excellent harbour that was destructively bombarded by our

[1] Miyashima, or Itskushima ("Island of Light"), is one of the San-kei or "Three most Beautiful Scenes of Japan"—the two others being Ama-no-Hashidate ("The Bridge, or Ladder, of Heaven"), a narrow pine-clad peninsula near the little seaport town of Miyatsu, on the north coast of Hondo; and Matsushima, the archipelago of wooded islets in Sendai Bay, on the east coast of the same island. Miyajima is small but very mountainous, and owes not a little of its beauty to the pine-groves with which it is covered. The great temple, which dates from about 600 A.D., is built on piles on the beach, and at high tide the whole structure appears to be floating on the water. Huge torii standing in the sea some distance away lend an added picturesqueness to the scene. The long galleries of the temple are full of pictures by Japan's most famous old artists.

fleet in 1863, during the early troubles amid which foreigners settled down to friendly relations with the Japanese. This was capital of the former province of Satsuma, celebrated for its old pottery-ware and for its proud warrior chiefs whose rebellion against the new order of things made, in 1877, the last serious struggle of Japanese Toryism. Kiushiu is exposed to more formidable commotions from its volcanic mountains, one of which, Aso-san, is said to have formed the largest crater in the world, 12 miles in diameter.

The island of Yezo, on the north of the group, is larger than the two southern ones put together, but far more thinly peopled, the population being only a few hundred thousand scattered over its mountainous and thickly-wooded

Nagasaki Bay. From a Japanese photograph

surface. It has a curious shape, like an ivy-leaf, with a curved stem formed by the volcanic masses and bold peaks enclosing Volcano Bay at the southern end. Here a deep strait separates it from the main island, making a distinct break in animal and vegetable life. The conifers so common to the south in Yezo yield to thicker growths, and monkeys are no longer found in its jungles, grouse also taking the place of pheasants. The short, rushing rivers are full of salmon and other fish. There is plenty of coal on the island as well as of useful timber. A railway has been opened from the west coast to productive coal-mines lying above Sapporo, which ranks as the capital town; though Hakkodate, the southern port, is the largest place on the island, containing almost a fourth of its population. On Volcano Bay, the harbour of Muroran expects to prosper through ironworks; and Otaru is another rising port at this end. On the eastern side a small line helps to work the valuable sulphur deposits of Mount Yuzan. Most of the island is still wild forest, whose explorers, like Mrs. Bird, speak warmly of the beauties of its coast and mountain scenery.

The winter climate is severe, and the shores are beset by fogs, so that to

the Japanese this island seems a Siberia, whose resources they are not eager to exploit. Many of the inhabitants came here as convicts, or as military colonists settled on the land with an obligation to service. The native Ainus, whose long beards and hairy bodies give them such a formidable air, the women often disfiguring themselves with a tattooed moustache, are in fact a simple, superstitious, submissive people with some savage good qualities, but cursed by a weakness for strong drink, which enters into their very primitive ideas of religion, as they too willingly swallow libations before the white posts crowned with shavings that make the most visible *lares* of their filthy households. Beside their small villages is often seen a bear in a cage, which seems also to have a sacred character among them. Some are hunters, but for the most part they live by fishing, and drink is their only point of contact with civilized life. Among them are said to be traces of a still older aboriginal race, dwarfish pit-dwellers who have long ago dwindled out of existence. The despised Ainus, in turn, seem to be disappearing before the Japanese, as they have done from the southern islands. In Yezo they at present number 10,000 to 15,000. Groups of them inhabit the rocky Kurile Isles, whose smoky peaks continue the volcanic backbone of Yezo, and form with it the Japanese dependency called Hokkaido.

Formosa (or Taiwan), Japan's southern acquisition, is rather smaller than any of its main islands. Its population is two or three millions, who, if all accounts be true, may give their new master more plague than profit, mostly mean Chinamen and tribes of mongrel savages, at daggers-drawn with each other. Further drawbacks appear to be heavy rains, floods, earthquakes, and an unwholesome climate in parts. The name Formosa ("Beautiful") came from early navigators' admiration of the east coast, one mass of precipitous mountains falling into the sea by cliffs several thousand feet high, and rising over 14,000 feet in the summit christened Mount Morrison, by the Japanese named "the new high mountain". The lowland soil is fertile, producing tea, sugar, rice, and specially camphor. Coal, sulphur, and petroleum are other resources to be developed by the Japanese, who have begun by making a railway along the west side. Here stand the chief towns, Taihoku and Taiwan, behind the best harbours, which are not so good as that enclosed by the Pescadores group off this coast.

Formosa is linked to Japan by the chain of Loo-choo (or Liu-kiu) Islands, stretching over some hundreds of miles, the principal one Okinawa, on which stand the capital, Siuri, and the chief port, Nafa, *alias* Okinawa. The whole population of this hurricane-swept archipelago numbers some few hundred thousand of mixed Japanese origin, highly civilized on models taken from China. As in the case of Korea, a suzerainty over them was long claimed both by China and Japan, but they came definitely into the rising empire soon after its reformation.

Farther east, 500 miles south of Yokohama, lies the remote Bonin Archipelago, a group of igneous rocks, among which Port Lloyd is the chief harbour. Hardly inhabited, they used to be a sort of No Man's Land, where America and England at one time made unsuccessful attempts at settlement; but now, with their turtles, lemons, and bananas, they are recognized as belonging to Japan, that before long may be looking out for new colonies on which to expand herself. Already her enterprising sons have furnished a large contingent to the population of Hawaii; and Japanese are found as far as India, America, and Australia.[1]

[1] The southern half of Saghalien was resumed by Japan after the war (v. p. 120).

JAPANESE LIFE

The early civilization of Japan having been imported from China, the customs of the two peoples are in many respects similar, and much of what has been said of the one nation applies more or less closely to the other. Like the Chinese, the Japanese are elaborately courteous, given to idle compliments and to honorific forms of speech. But in Japan, as seldom in China, this overdone politeness goes with a friendly and pleasant manner towards strangers, especially notable in the women. The blunt Briton is readily captivated by the smiling *musmees* who wait upon him at any tea-house, plumping down on their knees before him so cheerily, and knocking their big chignons on the floor so obsequiously that he finds in their fresh, round faces and narrow, twinkling eyes *une beauté du diable* soon lost in wrinkles. The landlord of such an inn receives and dismisses the guest with an air of hospitality disguising overcharges in the bill. The first impression one is apt to get from the Japanese may be of a careless, merry, kindly race of grown-up children. It is when one has to deal with them in the way of business that deeper shades of character come out. Then they show their share of the selfishness common to the sons of Adam. Morals far from austere go naturally with a want of seriousness; but those who seem to take life so lightly can be earnest enough when gain or revenge or honour are in question. European merchants, it is said, prefer to trade with Chinamen, complaining of a shiftiness in Japanese dealings, perhaps to be explained by the contempt in which commerce was held here up to this generation.

Photo Underwood & Underwood

A Morning Ride in a Jinricksha

It is their undersized bodies and short legs which made brawny John Bull too ready to take the Japanese for figures of fun, belittling them as "Japs", and finding them so ridiculous in the European costumes that seem so out of keeping with their Mongol features and sallow tint, often indeed no darker than that of Europeans. The men run hardly over 5 feet high; the women are still shorter. But there is plenty of nimble wiriness in their small stature, as any stranger must confess who, in the *jinrickshas*, or grown-up perambulators, which make the cabs of Japan, has been drawn at the rate of 6 or 7 miles an hour by one or two of these pygmies, who could keep on at the same pace for an eight-hours working day, thinking themselves well paid with sixpence an hour,[1] and seeming

[1] *Rickshaws*, as the word tends to become in English mouths, are a modern invention in Japan, from which their use has spread into other Eastern countries.

to take the toil for a pleasure. It is said, indeed, that these active fellows break down early, dying of heart-disease. There can be no doubt, too, about the courage of the little Japanese soldiers and sailors who already wear European uniforms as if born to them. Like other Orientals, they endure pain and extremes of temperature well. If there is any want of stamina in the race, it comes out in flabby townsmen who have degenerated through the aping of our vices, as much as by inheritance of a stunted lot. Intellectually they are intelligent, sharp, and quick to learn, while lacking interest in deep questions. Some might admire this as a practical rather than speculative nature; others lament over it as incapable of ideality or veneration. For all its imposing temples, Japanese religion has been defined as "a little fear and a great deal of fun": when the worshipper, clapping his hands to call the god's attention, has mumbled his prayer and thrown his small offering into the money-box, he more willingly passes on to the amusements, not always unobjectionable, that here flourish round a shrine to make the sauce of devotion. Something of the same lightness marks the Japanese relation to Christianity, many of whose converts are so only in a superficial sense; and in this easy spirit it is that their leading men have considered the advisability of adopting some form of ours as a state religion, by way of keeping up with Western peoples. Our Sunday has already been established as a holiday. The educated class, indeed, are more attentive to the teachings of Comte and Herbert Spencer than to Gospel doctrines, while they take a critical interest in our religion as an agent of civilization. Yet against this general charge of indifference may be set the constancy with which early Japanese Christians clung to their faith through persecution, the fanatical reverence of the masses for their ancient temples, and the manner in which, every now and then, young Japan fires up in angry demonstration against the influence of foreigners. It is difficult for a Western mind to analyse the mixture of superstition and worldliness which makes the groundwork of Japanese character, beneath the superficial enlightenment it has taken on so readily and the pleasant manners that seldom fail to charm strangers.

Photo T B Blow

Devotee at a Shinto Shrine

In the virtue that proverbially comes next to godliness the Japanese set a good example to their Chinese neighbours. They are much given to bathing in vats of very hot water, and with a simple-minded want of shame that scandalizes European travellers. The better class of houses have a bath-room outside into which the whole family enter in company, sometimes two or three times

a day, with much punctilio as regards precedence but not privacy. In the city of Tokio there are nearly 1000 public baths, where hundreds of thousands wash themselves daily for a cent a head. Every inn has its bath used by both sexes, not always even separated by a slight partition; and the natural hot springs of the country are greatly resorted to, invalids spending hours, even weeks, in the water, as if to boil their complaints out of them. In connection with bathing, massage is much practised among them, especially by blind shampooers, who show a peculiar delicacy of touch. Another feature of Japanese practice is not likely to make its way in Europe, the use of the *moxa*, a small cone of vegetable matter burned on the flesh, leaving lifelong scars. This cautery had a moral as well as medical use, being once in favour as a punishment for naughty youngsters. Similar marks are burned on the bare pates of Buddhist priests. Children are often disfigured by scabs, which seem not to strike the Japanese as disgusting; indeed they show themselves little squeamish in various matters on which we have another standard of propriety. While so particular about washing, they are not sensitive with regard to smells, a tolerance that gives foreign visitors something to put up with. Our love of domestic seclusion they do not understand. Their houses stand open in front, so that most of what goes on within can be seen by any passer-by. Only recent laws, not always strictly enforced, prevent the lower class from going naked in the streets.

T. B. Blow

Pasting Paper on the *Shoji* (Window Frames)

Their houses are usually mere frameworks of wood and paper, thatched, tiled, or shingled, of one story or two at most—a slight style of architecture adapted to the danger of frequent earthquakes. The walls are rather sliding shutters, removed through the day, and in winter replaced by semi-transparent paper. The interior is open, but can be divided into rooms by paper panels, slid out as partitions, on which a knife or a wet finger can at any time make peep-holes. The floor is covered with thick white- or straw-coloured mats, kept spotlessly clean, everyone taking off his shoes before he enters a dwelling. The neatness and orderliness of even a humble household here are what chiefly impress a stranger. The only furniture will be readily-movable articles such as screens, ornamental stands for the display of flowers, tall candlesticks with spikes on which candles can be stuck, and small chests of drawers or cabinets. The Japanese squats on his heels, and his food is brought him on a tray of little lacquered bowls, from which he deftly picks it up with chopsticks. When he is ready for bed a quilt and round hard pillow can be laid out wherever there is

room. These airy mansions are tryingly cold in winter, and often have to be darkened by shutting up the wooden sides against rain. There are no fireplaces and no windows, or rather its paper walls make the house all window. People shiver over asphyxiating boxes of charcoal, which, like their oil-lamps and paper lanterns, are readily upset by the frequent earthquakes, and kindle among such combustible material rapidly-spreading fires. Japanese cities, so easily rebuilt, are often destroyed by these fires. Families who have any valuables keep them in fire-proof buildings in the garden. In the cities, now, stone and brick are more used, the new public buildings being usually in a solid European style, provided with special strengthening against earthquakes. Even before the Japanese learned from us the use of serviceable engines they had fire-stations in their cities, where, at the top of a tall ladder, watchmen kept a look-out for the beginning of any conflagration, then raised an alarm on a bronze bell, the district in danger being indicated by the number of strokes, as is done in America, to warn or assure householders.

Photo T. B. Blow

Peasants, in Overcoats of Straw, gathering Water-weed for Manure

The native dress is a loose arrangement of cotton or silk wrappers, open at the throat, into which both sexes seem glad to get back from the European costumes the Government has forced on the official class. In the country, indeed, they prefer wearing next to nothing even in cold weather; then a naked rickshaw hauler may be seen bundling on his clothes in a hurry when he comes in sight of a uniformed and perhaps spectacled policeman bound to enforce the law called for by foreign modesty. The working-class conceal their legs, when they must, with tight hose like those of mediæval Europe; more distinguished persons prefer a sort of divided-skirt, above which come shirts, jackets, and gowns, according to the season. Their feet are covered by socks, having a divided great toe, with straw sandals or wooden clogs for out-of-doors; but the use of European shoes is coming in, especially such elastic-sided ones as can be easily slipped off, removing the shoes being, as all over the East, what uncovering the head is with us. The Japanese commonly wear no hats, but sometimes huge straw or lacquer ones topping them off like a mushroom. English hats are much affected in the cities. Waxed-paper waterproofs are worn, or great overcoats of straw in the country, where, to save their clothes, men may often be seen going about in the rain with nothing but a loin-cloth and a paper umbrella. Straw is also used for

horse-shoes, soon worn out. The dress of women is not much unlike that of men, its chief feature being a large sash, called *obi*, kept up by a sort of bustle. The great point of a Japanese lady's toilet is her hair, elaborately padded, pomatumed, and gummed into chignons, and decorated with costly pins and combs. Reddening the lips and whiting the face are considered aids to beauty. The hideous custom is not altogether obsolete by which a married woman shaved her eyebrows and blackened her teeth, as if to give out that she had done with beauty. Tattooing, once common with the lower class, is forbidden by law. So also is the old right of wearing two swords, formerly the badge of a Japanese gentleman, who now goes equipped with a fan, an umbrella, a pipe in his belt, and perhaps an inkhorn. A piece of paper serves him for a pocket handkerchief. Everyone carries also a seal which he affixes as his signature. On the back of their coats servants wear the crest or device of their master, which figures much too on his own garments and belongings. Little children generally have about them a charm against accident and a metal ticket setting forth their name and address in case they should be lost, a curious mixture of superstition and practical sense which marks the national character. But by all accounts Japanese children are so sedate, orderly, and precociously well-behaved that it cannot be often they get into trouble or go astray.

The food of the Japanese is much like the Chinese bill of fare, chiefly consisting of rice or other grain, fish and eggs, and various pickles and vegetables. The influence of Buddhism has kept down flesh-eating, which begins to come in under foreign example; but most of the Japanese do not take to it more readily than we to their cookery. The meat oftenest eaten in the past was venison, served up under the disguising name of "mountain whale", as a concession to religious prejudice. Except as to cakes and sweetmeats, Japanese titbits, with their briny or insipid flavour, are held in suspicion by Europeans. The people in turn look on our use of milk, butter, and cheese as disgusting. They drink tea, and saké, a wine made from rice, when they can get it. Opium is not among their vices, but both men and women smoke tobacco from tiny pipes, giving only a few whiffs at a time. Cigarettes now come into fashion, and the use of light beer grows common among "up-to-date" townsmen.

They are very fond of amusements, especially of theatrical performances, which go on for a whole day without wearying the spectators. The popular plays are realistic or comic in their interest; but there still survives a more stately drama which deals with historical or legendary subjects in a style recalling the ancient Greek stage. What might rank as the Japanese *Hamlet* is that famous story o. the *Forty-Seven Ronins*, how one nobleman struck another by whom he had been insulted; how he was condemned to *harakiri*, "happy despatch", the dignified suicide of old Japan; how his faithful henchmen became *ronins*, masterless outlaws; how they waited their time to take vengeance on his enemy; and how they in turn, having satisfied Japanese honour, performed harakiri with a calmness that to this day consecrates the tombs of these popular heroes. The Japanese supply good actors as well as enthusiastic audiences, female parts being taken by young men, as with us in Shakespeare's day. The geishas, dancing-girls, are a class whose services come into great demand for more private entertainments. The dancing so industriously practised in Japan is rather what we should call posturing, every part of the body being brought into play more than the feet. The Japanese lute and other native instruments require diligent study,

but the pains spent thus are thrown away on Western ears. A very favourite spectacle is wrestling, performed by fleshy athletes who enjoy much the same admiration among the populace as our professional football-players at home. The people are fond of playing with cards, dice, a form of chess, and other board games, one of which has been brought to England under its native name Gobang. The upper class learn to adopt our music and dances, to ride bicycles, and to enter into the athletic sports everywhere acclimatized by English exiles. Of their own exercises the most violent is a kind of fencing or single-stick, a survival of the swordsmanship that was once a Japanese gentleman's great accomplishment. Children play with kites, tops, balls, battledores, and shuttlecocks, and with dolls, like our own youngsters. Among the liveliest of the national festivals are the two general birthdays celebrated for all children, that of the girls in March, of the boys in May, when the shops become a fair of toys, always in demand among a child-loving people. Dolls come to the front on the girls' anniversary, and miniature weapons on the boys', when is observed the curious custom of hoisting on a pole before each house a big artificial fish for every son it may be lucky enough to own. The European New Year has been taken as another great occasion for general decoration and exchange of presents and good wishes.

Photo F. B Blow

Entrance to a Tea house, Kioto, with Trellis of Wistaria Blooms

In domestic life the people seem happy enough, and the charming manners of their women imply no degrading state of subjection, though the position of the sex here is always one of what seems natural inferiority. Monogamy is the rule, made light for husbands by facile divorce and by a publicly-regulated and displayed system of prostitution which somewhat amazes foreign curiosity. Respect to parents and veneration for ancestors count higher among virtues than chastity, children being brought up to admire such models as, the "Four-and-twenty Paragons of Filial Piety", one of whom went the length of distinguishing himself by devotion to a cruel stepmother, while another at the age of three-score used to dress like a baby and sprawl about the floor in the pious design of making his parents forget their real age. One of the great times of the year is the Feast of the Dead, when people turn out to deck their family graves, and for three days give themselves up to observances of a pious holiday.[1]

[1] "Full of comfort must these three days be for the faithful souls who are always yearning to offer some service or some token of love to the dead. Now they come back; and though no one sees them, they take their old places in their

The dead are buried in a sitting posture, if not first cremated, as was the Buddhist custom, now more practised in imitation of European reformers. Funerals are conducted with reverence and sympathy rather than with the absurd noisy solemnities of the Chinese, the mourners, here robed in white, carrying flowers and green branches to pile about the coffin.

The spoken language of Japan is an agglutinative one, very difficult to learn in all its intricate delicacies, though a smattering of it can readily be picked up by foreigners. Its sound is musical, especially in the mouth of women. The writing of it would seem the study of a lifetime. The Chinese ideographic characters are the base of their literature, but besides this the Japanese have developed for themselves two syllabic alphabets nearly twice as long as ours, both of which are used, chiefly for connecting particles, while the main words will be expressed in type by Chinese characters, which makes a Japanese book hard reading. Roman letters also are coming into public use, as for the names of railway-stations. Since the revolution there has been great activity in printing, and some hundreds of newspapers are published; so many, indeed, that they seem to choke each other's growth. Japanese literature, already equipped with a large body of native authorship in history, poetry, romance, &c., now turns to the West for its inspiration, and contains translations of the best European books, which the educated class find more ins ructive than the Chinese windbags of philosophy that once schooled them. Every man of light and leading here seeks to know English, which it has been seriously proposed to adopt as the national language. But that the Japanese must have some difficulty in entering into the merits of our literature would appear from our want of appreciation of theirs. The novels in which they delight, issued from the press in hundreds yearly, seem to European readers to come under the head of *contes à dormir debout*. Bakin, the Scott or Dumas of Japan, is stated, in his lifetime of eighty years, to have written nearly three hundred books, the most popular of them running to over a hundred small volumes. A notable feature of Japanese books has been the beautifully executed paintings with which they were sumptuously adorned; but these, as well as the letterpress, too often come under the class known as "Rabelaisian". As a set-off to this weakness, it is declared that the Japanese language does not contain a single oath.

We now turn to the industries of this thriving people. Hitherto the chief occupation of the Japanese has been agriculture, while the patronage of her old feudal aristocracy nursed the handicrafts in which their artisans displayed such artistic taste and skill. But the land available for cultivation hardly supports an increasing population, which in the last generation has taken so kindly to some European ways. No superstitious prejudices have hindered the introduction of machinery as in China, and manufacturing becomes more and more common in

old homes. They find the house decked and garnished for their coming; the holy lotus flower, never used save for their honour, is gathered and set by their shrine; and many another lovely plant and sprig, all with symbolical meanings, are brought in. Rice and vegetables, fruit and cakes, are placed for them; no animal food is offered, as pure spirits would consider that a sinful nourishment, but tea is poured out with punctilious ceremony in tiny cups at stated hours. In some towns there is a market or fair held expressly that people may buy all they need for the entertainment of the ghosts. As these always come from the sea, torches are stuck in the sands to show them where to land; and when the three days are ended, and the travellers must go back reluctantly to their shadow-homes, then tiny ships are launched—straw ships of lovely and elaborate designs, freighted with dainty foods and lighted by small lanterns. Incense, too, is burning before they set forth; and then they go, by river or stream if the sea is distant, with their little cargo of love-gifts visible and their spirit travellers invisible, back to their joy or their sorrow in the underworld."—Mrs. Hugh Fraser, *A Diplomatist's Wife in Japan*.

Japan, turning certain districts into an Eastern Lancashire. As with us, the people tend to flock from the land to towns and factories. Already the country has to import part of its food, looking to pay for this supply by the exportation of goods for which till lately it had to depend on Europe. Wages, though they have risen enormously, are still lower than in Europe, so that in some branches of manufacture Japanese competition makes itself felt in Eastern markets. Cotton-spinning Japan not only carries on at home, but, since her war with China, has acquired the right to set up mills in the heart of that country. Silk and paper have long been other flourishing manufactures here. Coal-mining the Japanese have effectively learned from us. Machinery they turn out more or

Industrial Japan: Carpet Weaving. From a Japanese photograph

less successfully, though as yet a good deal of their plant and implements are imported from abroad. In some minor industries, such as match-making, they have secured the supply of the East. Boots, clothes, firearms, bread, and other articles they have learned to make as well as to use. Glass-making is of old standing, and before the revolution they had picked up the construction of clocks, telescopes, and spectacles. They are now turning out their own locomotives, wagons, girders, boilers, &c., and have made a beginning of iron and steel works. Under European superintendence, at first, they have laid well-equipped railroads, and tramways in the cities. Many of the towns are well lit by electric light. Pianos, harmoniums, violins, surgical instruments are here as highly finished as if made in Europe. They have excellent ship-building yards, from which they exert themselves to supply Japan not only with an efficient navy, but with a growing mercantile marine, which is indeed a revival of Japan's old activity in commerce, interrupted by that period of two centuries when intercourse with foreign

countries became forbidden. The old-fashioned junks are fast disappearing from Japanese waters in favour of smart craft not unlike our schooners, but with native peculiarities of rig. And to the indignation of the Europeans who once prospered by supplying Japan's hunger for civilization, its merchants are now showing themselves able to carry on business independently, tricks of trade and all. Slums as well as factories and blatant advertisements appear in its cities.

This industrial revolution threatens degeneration in the native art that constituted the charm for which Europe fell in love with Japan. Poorly-paid workmen here have inherited astonishing skill that contrasts with our machine-made ornamentation. If their designs want perspective, if they show more feeling for the grotesque than the sublime, they are free from the tyranny of symmetrical pattern; and individual taste has had room to work out a delicate sense of form and colour, entirely satisfactory in decoration if not so much in large compositions. Prisoners in the jails are readily trained to produce such prettinesses as have been popularized in English homes by screens, stands, and trays. The best craftsmen often rise to the rank of artists. Famous is the Japanese porcelain and pottery, real old specimens of which are the joy of collectors, very often ensnared by the imitations that flood the market. Hardly less so the lacquer-work, applied to large structures such as gateways and bridges, and to almost all domestic utensils, where, on a ground of lacquer-gum varnish, are laid so charming devices in metal and colour, sometimes representing the patient, loving labour of years. Another characteristic art is the cloisonné enamel that rivals the less-enduring performance of a painter. There are workers in embroidery who seem to paint with their needles. Carvings in wood, ivory, &c., show the same mastery, also workings in bronze and iron, and inlaying with the precious metals. The swords of Japan and its armour used to be celebrated like its swordsmanship, but these arts may now go out of use in the day of machine-guns and revolvers. The richness and glow of the silks, brocades, and other fabrics in Japanese shops make a spectacle to entrance idle customers from the West, who find a new joy in bargain-hunting among the hidden wares of such leisurely, such sympathetic, and apparently such disinterested tradesmen.[1]

The enthusiasm of globe-trotting patrons has not improved Japanese art, which seems in danger of vulgarizing itself by hasty production, and by keeping an eye upon foreign taste rather than upon its own ideals. Of this danger the people begin to be aware; and it is stated that the craftsmen show a tendency to return to old patterns. But it is to be feared that their innate sense of beauty must suffer from an imitation of Europe so earnest that even our gallows has

[1] "A visit to a mercer's is an amusing experience. Imagine a large, dim, low-roofed space occupying a street corner, from which the papered screens, for coolness' sake, have been removed. Between the posts that support the ceiling—under wide-spreading awnings—glimpses of swift traffic in burning sunlight, skurrying rickshas and pattering, clogged women. Within, a raised and matted square, sufficiently high above the ground for purchasers to sit comfortably upon the edge of it. On this a multitude of shopmen in long *kimonos* and wide silk sashes; barefooted of course, lest they should injure the fine mats. In the centre an immense brazier for the manufacture of the inevitable tea, without which no business can be done. You enter, remove your shoes, and are promptly supplied with a tea-cup and a fan, while your ricksha-men, leaving their vehicle without, sit by your side for the purpose of advice and criticism. If they were you, they would prefer this or that material and pattern to the one towards which you lean. It is no use to remark that the object under discussion is for your use, not for theirs. Their interest in their master is so kindly and complete that they must needs propound opinions. The shopmen chime in, discussion becomes animated; other shopmen approach to give their views, all calmly fanning; then other purchasers. It becomes a sort of chatty tea-party in which all are on an equal and familiar footing. Meanwhile a series of small boys, trained to that end, shout at intervals from their desks, in long piercing tones, exhortations to the shopmen, bidding them be brisk, and busy, and expeditious in display of goods."—The Hon. Lewis Wingfield's *Wanderings of a Globe-trotter*.

been substituted for the artistic decapitations and suicides of old Japan, as model prisons have replaced less humane dealings with roguery. The foreigners now help to check an indiscriminate copying which caricatured their own unpicturesqueness, disguising a Tokio cockney in trousers and pot-hat, and shackling a Japanese lady's gait in the whims of Parisian fashion. It is not only in matters of appearance that they borrow from the West. We have enriched Japanese life with many additions, good and bad, from vaccination and photography to bubble companies and corrupt or cantankerous politicians, some of which are bound to have a disintegrating effect on the national character.

Much of this change, indeed, so manifest in the cities visited by tourists, is as yet only on the surface, the masses still holding to their own customs and

Photo I. B. Blow

Making Silver Vases for Cloisonné Ware

ideas except in so far as new ones are forced on them by the ruling class, that has hitherto shown remarkable ability to direct such an astonishing development. The Japanese are in many respects so different from Europeans that Western institutions can hardly be rooted here without undergoing a good deal of modification, already making itself apparent. In many small matters as well as great the ways of the Japanese are exactly contrary to ours. He begins his books at the end; he puts his foot-notes at the top of the page; he turns his keys in instead of out; he builds the roof of his house first and has its best rooms at the back; he mounts his horse on the right side; he hauls up his boat by the stern; he squats down in sign of respect; he drinks his wine before dinner; he tips the servants on arriving at an hotel; *she* carries her baby, not in her arms, but on her back. Most of these instances are taken from Mr. B. H. Chamberlain's *Things Japanese*, which is itself an instance of what he calls the "Topsy-turvydom" of this part of the world, for while it has the dry form of a dictionary or cyclopædia it makes one of the most entertaining as well as instructive among the many books which, since its new epoch, have been written on Japan. Its transformation, in matters great and small, seems to have been steadily fostered by the emperor Mutsu Hito, who died in 1912, after so revolutionary a reign of almost half a century.

RUSSIAN ASIA

SIBERIA AND ITS INDUSTRIES

Siberia is made up of the basins of the great rivers flowing northward from the Central Asian heights, rivers not so famous as the Ganges or the Indus, but surpassing them in volume of water poured down to be turned into ice. The principal streams, opening into the Arctic Ocean by deep gulfs, are the Obi or Ob, the Jenisei, and the Lena, each with a course of 2000 to 3000 miles. To the Pacific flows the Amur, also nearly 3000 miles long, the left bank and the mouth of which now belong to Siberia. The eastern side is the more broken by mountains, for the most part of no great height; the western division presents rather that monotonous flatness which we take as characteristic of Siberia. In general the land slopes from south to north. On the south are mountains, steppes, and sandy deserts, such as we have seen making the northern part of the Chinese empire. Through the centre runs a belt of fertile black soil, 300 to 400 miles wide, naturally given up to long grass and birch woods, but capable of growing rich crops. Beyond this the land is covered by *taiga*, a dense jungle, chiefly of coniferous trees strangling each other in the struggle to escape from their own gloomy shade, felled into impenetrable tangles by storms, to rot in the damp darkness below or at the edge of morasses scummed by decaying vegetation; then pines and larches dwarf to bushes and mosses, and the Arctic shores have a wide border of *tundra*, deserts withered not by the sun, but by the eternal ice into which they merge.[1]

Taiga and tundra cover so much of the ground that more habitable regions of Siberia have been infected by an unduly bad reputation. Our general conception of the country goes little beyond a vast frozen waste, poor except in the furs of its animals and the minerals dug out of the ground by miserable exiles, whose fate makes its only glimmer of romance, lurid as the Aurora Borealis

[1] The characteristic *tundra* is a frozen marsh, relieved by heights of rock and glacier, half-melted by the hot sun into eager streams and stagnant pools. A few feet below the thawed surface the soil remains frost-bound even in summer, when the gray waste takes on a pale tinge of mossy green with bright spots surprising the eye here and there, and becomes alive with birds, but to man is almost uninhabitable through swarms of mosquitoes hanging about him like smoke, till he longs for relief in autumn frosts heralding the long dark winter. Not snow and ice so much as the mosquitoes, that plague all Siberia, are the true terror of the tundra, says the naturalist Brehm, who tells us how this naked watery ground has its moments of glory reflected from above. "When a thunderstorm threatens after a hot day the sky darkens here and there to the deepest gray-blue, the vapour-laden clouds sink beneath the lighter ones, and the sun shines through, clear and brilliant; then the dreary monotonous landscape is magically beautified. For light and shade now diversify the hill-tops and valleys, and the wearisome monotony of their colour gains variety and life. And when, in the middle of a midsummer night, the sun stands large and blood-red in the heavens, when all the clouds are flushed with purple from beneath, when those hill-tops which hide the luminary bear a far-reaching flaming crown of rays, when a delicate rosy haze lies over the brown-green landscape when, in a word, the indescribable magic of the midnight sun casts its spell over the soul: then this wilderness is transformed into enchanted fields, and a blissful awe fills the heart." The later explorer Nordenskjold, for his part, declares that the tundra has been maligned, his experience being to find portions of it in summer overgrown by luxuriant pasture.

glowing over the snow and darkness under which the land is buried most of the year. Only of late the world begins to realize the importance of this enormous Russian possession, in which some two or three dozen European kingdoms could be contained. It is measurable by degrees, a breadth of some 25° stretching along the whole northern side of Asia, with an area believed to come not far short of 5,000,000 square miles. Much of this is still little known; much is scarcely worth knowing; but if only one-tenth part were fertile soil, as a larger proportion appears to be, Russia might well value such a field of enterprise for its hardy population.

The Siberian climate is proverbial for severity, the temperature in winter falling so low that mercury often freezes, and birds drop down frozen to death. It is indeed the coldest of civilized countries; but it has a hot, if short, summer, at the height of which the thermometer may rise over 100° Fahr. In winter, unless when icy tempests break loose, the cold is made bearable by its steadiness, and by the usual brightness of the sky once it has discharged its load of snow. Man adapts himself to the snow and ice that make his environment for half the year. The surface then becomes more traversable, every river being turned into a frozen road, on which sledges skim lightly or beat easy tracks across the sheets of snow. The most trying time, so far as locomotion is concerned, will be the thaw of spring, when for weeks together the ways are slush-bound, fit neither for wheels nor runners; and with great commotion the ice breaks up on the flooded streams, often blocked by floating masses, and by trees swept down from the rotting forests. But quickly, with fitful returns of frost and snow, comes on the fierce summer; then, before the ice-heaps have melted away on the banks, they begin to be spangled by gay flowerets beneath the budding birch-trees. Nor are the endless snow plains so depressingly monotonous as we might suppose from our sullen winter. M. Jules Legras declares that, seen day after day, on a Siberian railway journey, the snow has changing aspects like the sea.[1]

Many travellers have dwelt on the glories of the Northern Lights, awfully lighting up these plains of snow. Another atmospheric phenomenon is the parhelion, or mock sun, which produces double or triple appearances of the sun set about with a white halo, sometimes tinted with prismatic colours.

The great roads of Siberian trade pass through the least uninhabited parts of the country, but even there the snow often shows for leagues unbroken save by the footmarks of prowling animals. The whole native Asiatic population of Siberia is less than 1,000,000, and most of their tribes seem to be dying out. They belong to various branches of the Mongol and Tartar race, degenerating into hyperborean savages in the frozen north. Their religion is more or less nakedly the primitive devil-worship known as Shamanism, clothed over in most

[1] "In the morning, under the radiant sun of these lands that hardly know a gray sky, the snow seems to sparkle with myriads of diamonds; one would think that each starry little crystal throws back a sunbeam, and daily we glide, for two or three hours, through an endless glittering of tiny fireflies. Towards ten or eleven o'clock all these gems grow dull, but, with the sun's new inclination, the white surface reflects a fresh tone. In the morning, sparkling, ethereal, young, by force of purity, as the day advances it takes more sober bluish tints, which deepen in the shadows of the engine-smoke, but remain so tender that they seem almost to pale the blue of heaven. Towards the evening there comes a supreme glory: on the boundless plain, lost to sight, bordered far away by vaguely-caught forests, a fine outline drawn straight across the horizon, on the dead steppe where, a moment before, every living thing, man, horse, shrub, bird, made a black dot; over the still stretch where the eyes had grown tired of white, lo! all at once the sinking sun sets a rosy kiss. The pink glow slowly broadens, advances bit by bit, brightens by insensible degrees, heightened here and there by folds of steel-blue shadows, and by infinite undulations spreads to the darkening border of the horizon. A last oblique ray suddenly gilds some common surface, paling or wooden house, which for an instant stands out in full relief, then the glitter dies away. Soon the dusk shadows and deepens, the snow fades, and the rosy glow that covered it seems to shrink into a band on the edge of the cold sky, for long yet illuminating the twilight."

Siberian "Shaman", or Ostiak Priest

cases by a thin coat of Buddhism or Christianity. The most vigorous stocks appear to be the Buryats, neighbours and kinsmen of the Mongolians; to the north of these the widely spread Tunguses, who are allied to the Manchus; and the Yakuts, who have blended with the Tungus tribes, but belong originally to the Turkis of central Asia, from which stock, also, Kirghiz and other Mohammedans stray over into the southern parts of Siberia. In the far north, bordering on Europe, are the Samoyedes and Ostiaks, akin, through the Lapps, to the Finnish race transplanted into Europe from the Asian highlands.

For centuries this thinly-peopled region has been invaded by Russian emigration, the pioneers being bold Cossacks, hardly less savage than the aborigines whom they displaced or enslaved. As in the case of our own colonies, private enterprise led the way here; but the Russian rulers soon saw well to back up a conquest which gave them wide training-ground for warlike subjects and a formidable exile for troublesome elements of society. At one time the population chiefly consisted of Cossack settlers, still fostered by special privileges, and of prisoners transported here under various conditions, often joined by their families, to whom were added exiles by their own will, seeking to escape the restraints of law and civilization. But, as Siberia proved to be not all such a thankless soil, there began to drift into it a larger proportion of industrious emigrants, the natural overflow of a poor and prolific population. Voluntary emigration, now encouraged and regulated by the Government, goes on apace, at a rate accelerated with the opening of communications, every settler getting a farm measured in square miles, free from taxes for three years. Of late, some quarter of a million new inhabitants have been added yearly; and the whole population of Siberia is estimated at about six millions.

Buryat Woman in Gala Costum

One of the most active and thriving constituents is thousands of German settlers, their natural prosperity looked on askance by less thrifty neighbours. A good many Polish patriots have been exiled here; and the ubiquitous Jew trader of eastern Europe has not failed to find his way over the Urals.

This fast-growing nation has its shortcomings. For the most part ignorant and superstitious, with little chance of culture, condemned by the climate to long spells of sleepy idleness, scattered among half-heathen natives with whom they assimilate but too readily, the Siberian Russians make a boorish and loutish folk, given to drunkenness, gambling, lying, and laziness, contented with black bread and cabbage soup if they can season it with the brandy and beer of the country. Their strong point is a physical vigour that should help them to grow out of the semi-barbarism imposed by those circumstances. A high birth-rate is checked by a high death-rate, weeding out members unfit for survival in such trying conditions of climate, with little help from medical resources. The spirit that sets a man upon emigrating from the familiar routine of home is itself a promise of strength. As for the demoralizing convict element, that seems not in too large proportion to be wholesomely absorbed. The offences punished by exile are sometimes only a form of misdirected energy. The experience of Australia goes to show how even vulgar crime may be deodorized by contact with the open-air honesty that should be developed by thriving circumstances; and here the sympathy of the ordinary peasant for "unfortunates" is excusable as connected with the fact that many of the exiles of Siberia have all along been political prisoners whose offence, as often as not, would be a higher measure of intelli-

Emigrants crossing Lake Baikal — Photo. J. F. Fraser

Convicts, Irkutsk Prison — Photo J. F. Fraser

gence or indignant hatred of oppression that marked them out among their more submissive fellows. As an antidote to the really criminal element there are communities of banished Russian dissenters, whose moral character seems often in direct ratio to their want of orthodoxy; while, on the other hand, native offenders from Turkestan are not a desirable addition to the Siberian population. In all, the victims of Russian law are said to be less than 4 per cent of the whole emigration; and this proportion goes on decreasing as Russia recognizes the advantage of filling its great Asian dependency with a sturdy industrial population, unstained by discontent. The location of convicts is now limited to certain mining districts, out of the way of agricultural progress.

As yet most of the towns are little more than villages of log huts, sometimes straggling for a mile or two along the high-road. Among these humble homes, best furnished with smoke and dirt, stand out a few more solid dwellings, the residences of officials or traders, and the Greek church with its green or blue cupolas and other tawdry splendours. More prosperous places, but for public buildings and the residences of rich folk, some of them rich indeed, seem a greater aggregation of the same wooden houses; and in all Siberia there are not half a dozen cities as large as some of our county towns. Some of the provincial capitals, however, show a sense of what is due to their dignity in solid architecture for institutions attesting how the country is regulated and administered by Europeans, who will not let the sons of the soil lose their civilized birthright. The better class are often praised for a hearty and frank, if sometimes rather too pressing, hospitality to strangers, who, indeed, must often come as a godsend into the monotony of Siberian society.

Unfortunately, the ill-paid official class is accused of the corruption that too much infects all Eastern governments; and while the Siberian, like other colonists, has developed a sense of independence unknown in Russia, his mind is paralysed by something of Oriental fatalism, which lets him submit to oppression as inevitable, taking refuge from his troubles in drunkenness or venting his wrongs in stealthy crime. Protests against unpopular orders, it is said, sometimes take the form of incendiary fires, where wholesome public spirit finds little material to work upon; and the improvident peasant is only less slow than the nomad native in accepting forest laws to check their wasteful consumption of timber. Till recently Siberia was practically under police-government, a tyranny tempered by dishonesty. A few years ago came into operation a new judicial system, from which great things are hoped. But the Siberian has been used to obey authority rather than law; and the law must be a very flexible instrument to suit his special circumstances, distance from centres of government alone making difficult his relations with judicature.

Next to good administration such a country urgently needs means of communication. In our own time it has been shown that the northern mouths of the rivers are open to navigation, but only during a short summer season. The main artery of travel has hitherto been the caravan road to Kiakhta, on the Chinese frontier, by which even in the depth of winter travellers could cross the continent by a rough but cheap posting system, a month's journey, under favourable circumstances, from Moscow to Peking, while tea takes a year or so on its way from the market of Hankow to the great fair at Nijni Novgorod. Beyond Irkutsk this road gives off two branches, one keeping straight forward to the Amur, that in summer is navigated by steamer to the Pacific coast; the other

turning north towards Kamtchatka, on which after a time horseback is exchanged for an uneasy seat on a reindeer, or the journey ends in sledges drawn by dogs. On the frequented roads, where milestones mark how many thousand versts one is from Petersburg, and if not telegraph poles, branches of trees or mounds surmounted by crosses line out the way through deep winter snows, there are rough post stations at fixed points, in which the traveller may rest, if he can for noise, smoke, and stench, till his turn comes to be carried out by sturdy half-broken horses driven wildly through thick and thin, often, when the jehu happens to be drunk or the "fare" open-handed, in a manner that gives a spice of adventure to such a journey. The *tarantass* of Russian travel has been often described, a kind of sledge on springless wooden wheels, at the bottom of which

Siberian Tarantass

Photo, W. H. Rau

the occupant finds what ease he can in curling up among the softest part of his baggage.

The military exigencies of Russia inspired its Government to push on the making of the Trans-Siberian Railway, that by a line of more than 6000 miles should link Petersburg to the Pacific. The goal first proposed was Vladivostock, near the southern end of the Russian Pacific coast-line, and the route was put into construction from this point as well as from Europe. But the plan was modified in a way that has come to be remodified by Japanese victories. Having acquired an ice-free harbour on the Gulf of Pechili, Russia took further advantage of China's difficulties to extort its consent for bringing the railway through Manchuria. The Vladivostock route was to become a mere branch, the main line, after passing through the south of Siberia, beyond Lake Baikal, being deflected into Chinese territory to find its terminus at Port Arthur. Completed at the end of 1901, this enterprise, enabling Russia to bring her military strength to bear on the Pacific, seemed also of the highest importance for the prosperity of Siberia by thawing the frost-bound conditions of its industry. But there are Siberians who expect no good of a machinery that will break up the conditions of a cheap and simple living, to give the hardy peasant's labour to be exploited by the speculations of trade. Sanguine projectors have already been planning further lines over frozen wildernesses,

and there is even a scheme in the air for tunnelling under Behring Strait; but it seems likely that Russia will have to drop expensive railway-making for a time.

What manufactures have been introduced into Siberia will naturally be carried on in the towns, which supply cloth, linen, soap, glass, paper, and other wares for the needs of the people, while richer fabrics and most luxuries must still be imported from Europe. Tanning makes a considerable trade where both skins and bark are abundant. A kind of nettle supplies a fibre which, like hemp, is turned to account for weaving into coarse cloth. One of the most flourishing industries, for which also the raw material does not fail, is the distilling of *vodka*, a fiery grain-spirit produced too cheaply for the good of the people, who have a lighter drink in *kwas*, a sort of beer brewed from rye. Tobacco is grown for the pipes and cigarettes of the colonists, and is eagerly sought by the natives also. Tea, mostly of a coarse quality, is also in general use, the *samovar*, in which it is boiled according to Russian custom, being the first hospitality offered to a guest. This, of course, comes from China, and the transport of Chinese tea and other wares along the great caravan route to Europe has hitherto been counted among the gains of the country—one that through the railway seems likely to pass out of the hands of horse-breeding farmers.

Photo J. F. Fraser

Engine on the Trans-Siberian Railway

The raising of stock is an easy matter on the steppe pastures and birch-wood clearings; and in this industry Siberia needs only more attention to the breed of almost wild cattle and horses, and to their care in winter, when they are often half-starved, in summer falling easy victims to a very prevalent sickness. Sheep also are reared in the south; but the wool does not seem to be turned to proper account, though whole sheep-skins make a common garment in this rigorous climate. Between the steppes and a northern limit of 60° there is plenty of excellent agricultural land to be taken up under government landlordship, large stretches being granted free to new emigrants, who can take their pick of choicer farms at the rate of under a pound for a square mile. On the central belt of black soil, even with the careless farming of the settlers, wheat yields fifteen-fold or more for some years. The product has hitherto been absorbed in the food of the country, but only scientific farming and quicker conveyance are wanted to make the harvests of Siberia overflow into European markets, as begins to be the case with the opening of railway and steamboat traffic. Rye, oats, potatoes, and other vegetables are largely grown; and the peasantry would live in rough plenty but for bad seasons that now and then mar the few months of summer into which agriculture must be compressed. While the timber in many parts is much like

that of northern Europe, large fruit does not seem often to flourish here; but currants, raspberries, and strawberries grow wild, and in the far north there is an abundance of acid berries that thrive on sub-Arctic soil, feebly represented on English heaths by such children's prizes as the bilberry and the cranberry. A small cedar nut is a plentiful dainty, and on the southern steppes melons and cucumbers come to a great size. In some parts bee-keeping proves profitable to the farmer, who, if he live near a road, can usually turn his winter leisure to good account as a teamster.

The natives of Siberia are little apt to till the soil. Their best crop is the warm skins with which nature has here furnished animal life, as in the far north

On the edge of the Siberian Forest

their herds and hardy dogs and reindeer trained to the service of man. Where a dirty Ostiak or Samoyede may deck himself out in furs that would excite a duchess's envy, hunger and cold have made men cunning hunters of shy beasts and birds, slain by all available means—by snares and decoys, by arrows, spears, and clumsy firearms. The wide-spread fires that often ravage the forests, poisoning the pastures far around with clouds of ashes, come as a godsend to the hunters, for then hosts of terrified beasts are driven into the open. The victims most sought after are naturally those whose spoils fetch a price when their flesh has been eaten. On the edge of the wilds merchants establish themselves to trade with simple natives or with better-equipped Russian hunters. The skins of Siberian sables and other martens are precious, so are those of finely-coloured foxes, blue, red, white, and black, and of ermines, which, for all their renown in

the trappings of dignity, seem no other than our despised stoat, glorified by the Arctic cold. Vast as is the region inhabited by these creatures, the most valuable furs grow scarcer, and threaten to become exterminated here like the beaver. The same fate is overtaking one of the kinds of deer native in Siberia, since its antlers supply a costly ingredient to Chinese medical quackery. Huge elks haunt the boggy forests, and wild reindeer the frozen tundra, where aquatic wild fowl afford plentiful sport, as do birds of the grouse kind in the forest zone, among them the strong-flavoured capercailzie that has been recolonized in Scotland. On the mountains roam herds of the wild sheep called argali. The wolf, that ruthless poacher, is treated as a common foe by farmer and hunter. Other beasts, from the lynx to the squirrel, are hunted both for their flesh and skin; but the Russians share with Jews a prejudice against the hare as food, and the white fur with which it adapts itself to the winter climate is of little value. Polecats, weasels, marmots, and others must be added to the list of sub-Arctic inhabitants; and the tundra breeds in countless numbers the lemming, a brightly-marked rodent between the rat and the mouse in size, which, though preyed on by beast and bird, increase so fast that they are driven to migrate in millions, eating up the lean pasture as they go, and sometimes, it is said, rushing to multitudinous suicide in the sea. On the southern borders tigers occasionally appear; in the Amur region they are, indeed, perilously common and large. The great game of the northern hunter is the forest bear, that, in such keen struggle for existence, acquires carnivorous tastes when his autumn diet of berries fails him, and shows a ferocity which makes hand-to-hand encounter with him the most honourable exploit of Ostiak or Samoyede manhood. The ice-bear lives more out of the way of man. In past ages Siberia was inhabited by the rhinoceros, and by that large elephant known as the mammoth, whose body has been dug up to be food for dogs after lying frozen underground thousands of years. The huge tusks of these great beasts make an article of commerce, the New Siberian Islands, notably, being rich in such deposits of fossil ivory.

"Fish-skin People" (Gold Tribe) preparing Salmon-skins for Clothing

Fish is the main support of native tribes living on the Arctic shores and rivers. The most valuable inhabitants of the northern waters, whales and seals, the sea-lion and the sea-otter, have been too much hunted down; but the supply of edible fish seems inexhaustible. In the breeding season the rivers of the north-eastern coast are so full of salmon that they can be caught by hand from the water, its level visibly raised by the finny crowd. Huge sturgeon will often be taken weighing from 200 to 300 lbs. The wild dogs that draw the sledges of

hyperborean tribes are fed on fish, and sometimes learn, it is said, to fish for themselves in the swarming waters. There is one native race about the Amur, known to the Chinese as the "Fish-skin people", because their summer costumes are of salmon-skin, sometimes elaborately worked or embroidered. Fish-pie is the popular dish of the Russians too. The climate helps to make fish cheap, as easily stored and transportable through the winter; already frozen fish are carried over the Urals into Russian markets; and this supply will no doubt increase with the railway traffic. In summer, fish-preserving is crippled in out-of-the-way places by a want of salt. Caviare, that treat "to the general" in Russia, is prepared from the roes of sturgeon and sterlet; and the gelatine extracted from fish makes another product.

The third head of Siberia's resources is its great mineral wealth, hardly yet estimated. Besides stones of price and gems in certain mountain districts, all the principal metals have been found in the soil, and several are mined and smelted, often by methods which would bear improvement. The largest yield comes from gold, the Siberian gold-fields having become renowned before the discoveries in California and Australia; and this inhospitable clime may still hide plentiful deposits of the precious metals. The average annual value of Siberian gold has been lately given as over £3,000,000. Some of the richest mines are the private property of the czar, so that the house of Romanoff should seem in no danger of falling into poverty. But for the owner gold-winning is not always so profitable, and, for the workers, by no means such a romantic task, nor yet such a gloomy one, as might be imagined. Dr. Lansdell describes the famous gold-mines of Kara as like a big gravel-pit, 20 to 30 feet deep, in which sullen prisoners were busy, under charge of armed sentries, in excavating the auriferous soil and carting it off to be washed and sifted. In the final process 240 tons of earth had been refined into less than half a pint of gold-dust mingled with iron, weighing perhaps a pound. At this rate it is understood that much of the mining does not pay, unless as employing convicts; and perhaps, in the long run, the coal deposits of Siberia will prove more valuable than her gold and silver. Here, as elsewhere, the precious metals prove to have a demoralizing effect, the gold-mines being hot-beds of dishonesty and distaste for steady labour that flourish too readily on Siberian soil.

Gold and other metals are worked here both by the state and by private enterprise, and by free as well as convict labour, though, indeed, the free miners seem to be little better than slaves. The condition of the much-pitied exiles condemned to this durance makes a burning question of controversy. Dr. Lansdell, for one, after carefully examining the prisons of Siberia, came to the conclusion that, however matters may have been in the past, the rigours of such a fate seem now much exaggerated in popular imagination, the worst evil for the convicts often being that they have not enough to do. Mr. Kennan, on the other hand, formed a much more unfavourable opinion of the Russian Government's tender mercies, which he expressed so strongly as to be forbidden the Czar's domains where he had made such unwelcome observations. The narratives of political prisoners, who form an incongruous element among the vulgar criminals transported here, are, of course, coloured by natural bitterness; and their fate attracts natural sympathy in the belief that their offence often was being more enlightened and more outspoken than the mass of their countrymen. It must be remembered that the ordinary convict, especially of the class condemned to hard

labour, is apt to be a desperate and brutalized character, often guilty of murder, which only in special cases is punished with death by Russian law; for these, prison discipline need not be too indulgent. Others, indeed, are such as in our country would be thought more fit for a lunatic asylum. Incurable drunkards and the like disturbing members of society have been sometimes got rid of by being sent to Siberia. The exiled Poles, and Russian liberals and patriots, seem usually to have been put to lighter labour, if not from the first left to themselves, and sooner or later might hope to be practically free on condition of remaining in Siberia. Many of these exiles found themselves able to carry on professions or business with a success that ameliorated their lot; and to them in no small degree has been due the civilization of Siberia. As to the present generation of political offenders, suffering through the repression and resentment whose opposing forces threaten to upheave Russian society, we will not speak. It is only a century ago that Britain banished men to the Antipodes for the crime of advocating what now seem natural rights; and in those days our Botany Bay too had its horrors. This much may be said, that the Russian Government is clearly alive to the criticism of European opinion, and that some at least of its agents are concerned with the claims of humanity; yet many of the luckless victims of its suspicion have sore cause to sigh out that Russian proverb: "Heaven is so high and the Czar so far!" The present czar, indeed, is credited with a desire to abolish the system of political exile.

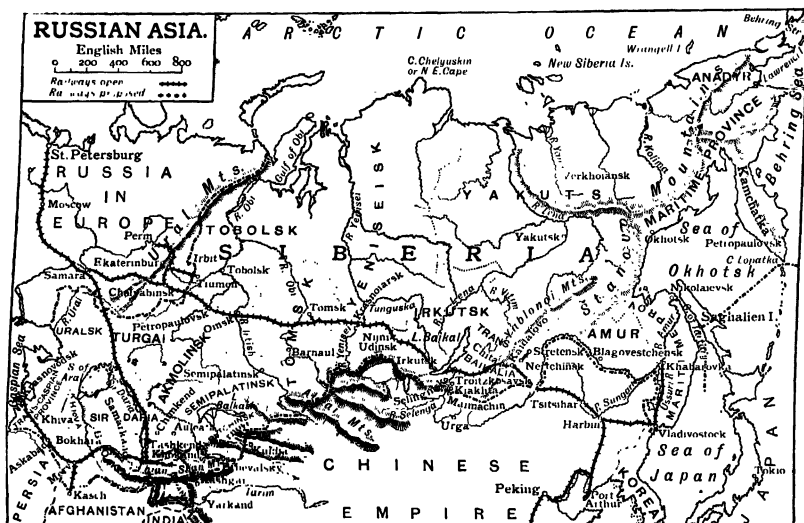
THE SIBERIAN PROVINCES

For administrative purposes Siberia is divided into three governor-generalships: Western Siberia; Irkutsk or Central Siberia, which includes most of what used to be known as Eastern Siberia; and the Pacific provinces of the Amur Government. These regions are sub-divided into provinces, which may be mentioned under the above heads. Divisions and centres of government have been a good deal shifted of late; and the advent of the railway may act in still further disturbing the relations and proportions given as follows on the most recent authorities available.

THE AMUR GOVERNMENT

This division takes its title from the river on which Russia definitely established her rule only some half a century ago, at the same time acquiring the coast down to Korea. The Primorsk is the name given to her older maritime provinces, which, bordered inland by the broad Stanovoi range, for the most part a highland plateau rather than a mountain chain, now stretch from the Korean frontier to Behring Strait. At the mouth of the Amur is the port Nikolaievsk, originally intended as chief station of the Russian fleet in the North Pacific; but its place has since been taken by Vladivostock, prettily situated upon Victoria Bay, rechristened Peter the Great Bay, 100 miles to the south. The fact of both these harbours being ice-bound in winter tempted the Russian Government to take the first opportunity of gaining an open port on Chinese ground, as was done at Talienwan Bay; but *sic vos non vobis!* came to be written upon Russia's constructions here. The Manchurian line, whose end is now in

Japanese hands, has a branch from Harbin to Vladivostock, connected also by rail with Khabarovka, the provincial capital, on the Amur, whence the trans-Siberian route is joined by river-boats.

Below the mouth of the Amur the so-called Gulf of Tartary should rather be called a strait separating the mainland from the Island of Saghalien, which, about as large as Ireland, is rich in coal, worked by convicts, who are now brought round on shipboard through the Suez Canal. Of late years the Russian Government has seemed inclined to concentrate its convict settlements here, making Saghalien the Botany Bay of Siberia. This mountainous island has a damp, raw

climate to make it a dreaded place of exile; and is thickly wooded by a mingling of the Japanese and the Manchurian flora. Japan, that gave up its claim to part ownership in exchange for the barren Kurile Islands, has now regained the southern half as a conquest in the late war.

On the mainland, farther north, the official station Okhotsk, though little more than a village of huts, gives its name to a wide inlet of the ocean, locked in by the Kurile Islands. At the mouth of the Okota River a narrow strip of coast, outside of the eastern Siberian mountain range, curves round the Sea of Okhotsk and its northern gulfs; then the Primorsk broadens out in the basin of the Anadyr, beyond whose gulf comes the utmost northern corner of Asia with the large islands of Wrangell and St. Lawrence on either side of it, as if to guard the perilous channel that cuts off America. Almost to the point of this Chukchis promontory, as it is named from a native race the Russians found it harder to conquer than to exterminate, runs on the highland that makes the parting between the feeders of the Arctic Ocean and of the Behring Sea.

Southward projects the long peninsula of Kamtchatka, whose name passes almost as a synonym for frozen darkness, but its climate seems to be less severe than on the mainland. It is traversed by a range of great volcanoes, one of them

believed to be 16,000 feet high, which stretches from Alaska, through Kamtchatka, the Kurile Islands, Japan, and the Philippines to Malaysia. Kamtchatka has been Russian for two centuries. Its chief product is furs; and fish supplies the staple food of the natives, who are vanishing before Russian traders and emigrants. The part of this earthquake-shaken country most fit for settlement is the valley of the Kamtchatka River flowing across the centre of the peninsula, where summer brings out an astonishing luxuriance of grass and flowers. Near the south end is the capital Petropaulovsk, an excellent harbour, defended against the Allies in the Crimean war, and dignified by monuments to the navigators

Vladivostock Harbour. (From a photograph by Mrs. Bishop)

Behring and La Perouse; but its thousand or so of inhabitants represent the poverty of a land that, over some 85,000 square miles, contains not 12,000 people, a dozen or a score houses making a place of local note. The population of the whole coast-line is put at about 100,000, with some 20,000 more on the Island of Saghalien.

The Amur, "River of the Black Dragon", formed by the confluence of the Shilka and the Argun, has a length of from 2000 to 3000 miles, entitling it to rank among the great rivers of Asia. After an erratic course, generally eastwards, it turns among the mountains of Manchuria to flow northwards through the Russian Primorsk, where its broad channel opens into the Gulf of Tartary by a marshy delta. Near the bend it is joined by the Sungari, flowing from the south through Manchuria, so that, as far as general direction goes, this might be taken for the main stream. From the same direction comes in the Ussuri, that separates Manchuria from the Primorsk. Higher up, the Amur's left bank makes the border of the Amur Province, whose capital is Blagovestchensk, a quite modern town on American pattern. Near it the river is joined by the Zeya, that has collected other streams from the northern mountains, cutting off this region from the Arctic watershed.

The Amur valley has been styled the Garden of Siberia, its slopes luxuriantly wooded and its plains growing grass as high as a man. The river breaks into channels, enclosing islets fringed with white sand, so gay in summer with leaves and blossoms as to seem like "floating flower-beds". Where it forces its way through the Manchurian mountains, the scenery is described by Dr. Lansdell and other travellers as very picturesque. "Almost every minute the picture changed, hill, forest, and cliff giving variety to the prospect as we wound our way through the defile. Here and there were tiny cascades breaking over the steep rocks to the edge of the river, and

A Corner of Lake Baikal [1]

occasionally a little meadow nestled in a ravine. At times one seemed completely enclosed in a lake, from which there was no escape visible save by climbing the hills, and it was impossible to discover any trace of an opening half a mile ahead." When leafless and buried under snow, as seen by Mr. Lionel Gowing in his adventurous winter drive across Siberia, or when swept by tempestuous *purgas*, this district presents a less charming aspect; but on the whole the moist winds of the Pacific give it a milder climate and richer production than belong to most parts of Northern Asia; then access by sea and by the river appears to promise it rapid prosperity, as yet only in the bud.

The Amur is navigable to the western edge of the province, beyond which, steamers pass some way up the Shilka, the left-hand tributary that here joins the Arun. The Shilka is the chief stream of the Transbaikal Province, so called from Lake Baikal making its western boundary. This long highland lake, known to the Mongolians as the "Holy Sea", is the largest reservoir of fresh wate. in

[1] From *Manchuria*. By Alex. Hosie. (By permission of Messrs. Methuen & Co.)

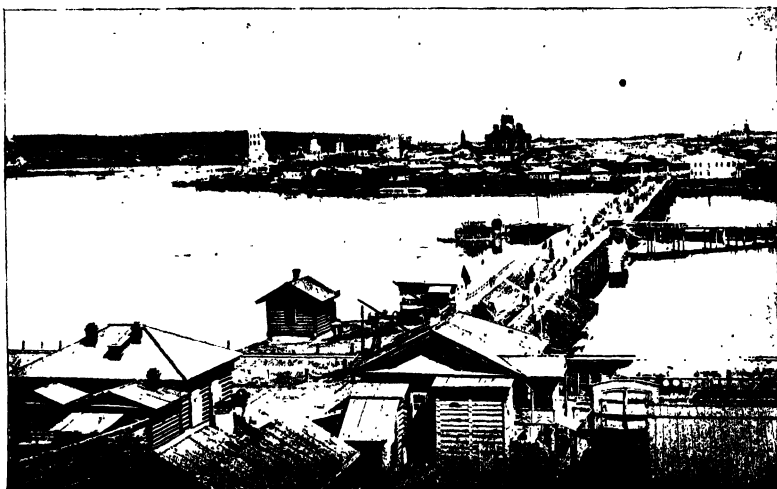
Asia, its area of 14,000 square miles having to be multiplied by its depth, which in some parts is as much as 4500 feet, far below the level of the sea. It seems to consist of two original basins now merged over a rocky ridge. The beautifully transparent depths are walled in by grand precipices at the foot of snowy mountains, below which hot springs abound as a hint of volcanic energy still sometimes displayed in earthquakes. The road to China crossed the frozen lake in winter, and it was originally schemed to carry the trains over on a huge ferry by the help of ice-breaking machinery supplied from Newcastle; but to make surer against delay through storms and fogs frequent here, the line has now been taken round the southern end. The country to the east is a mixture of mountain and plain, reminding Dr. Lansdell sometimes of the Wiltshire Downs and sometimes of the English lakes. Through it runs the great Arctic watershed, here bending round to the north under the name of the Yablonoi or Apple-tree Mountains, a name suggested by their rounded summits, that at a height of a few thousand feet give easy passage.

Sheltered by mountains from the moist ocean winds, the Transbaikal has a dry climate; and even on the hills there may be little snow in winter. Thanks partly to its being on the highway to China, it is at present rather less thinly populated than the Amur Province, having some half-million of people dispersed about its mountainous surface, in extent nearly equal to the German empire. The capital is Chita, on the Ingoda, one of several streams that unite in the Shilka. Lower down comes Nertchinsk, chief town of a mineral district, in which are the noted gold-mines of Kara, where 2000 convicts were once kept at work; there are also silver-mines, now, we understand, discontinued as unprofitable. Selenginsk, towards the western end, has an interest for us as formerly seat of an English mission that has left its graves as its only monuments. Perhaps the best-known town in the province is Kiakhta, on the Chinese frontier, a lively international market and custom-house of the tea trade, where hitherto the bales of brick-tea were sewn up for their sledge journey, after being jolted across Mongolia on camel back; but the railway will probably put an end to this industry. Three towns, indeed, are grouped by the little brook that separates the two empires, Kiakhta, with its sumptuously adorned cathedral, the abode of the Russian merchants; Troitzkosavsk, about a mile off, the two together containing about 10,000 people; then, beyond a narrow neutral zone, Maimachin, the Chinese frontier station, where no women are allowed to live. Within the Russian border, hereabouts, Chinamen are found thriving among the Buryat natives, who have a local Mecca in the Buddhist shrines about the "Lake of Geese".

CENTRAL SIBERIA

Lake Baikal, filled by the Mongolian rivers Selenga and Orkhon, united in one stream, near its south-western end discharges itself through the gorges and rapids of the Angara into the Yenisei, whose basin makes one of the provinces of what used to be called Eastern Siberia, but is now rather Central Siberia, officially known as the Government of Irkutsk. The name comes through the small Irkut River joining the Angara at Irkutsk, a place of over 60,000 people that boasts to be the "Paris of Siberia". This "White City", as it also styles itself, stands on an elevated tongue between the two rivers, well displaying the domes of a fine cathedral and other public buildings it can boast,

though more than once it has been ruined by such a conflagration as makes quick havoc among the wooden dwellings of Siberia. By a bridge of boats and a ferry across the Angara it communicates with a transpontine suburb of villas which has somehow come by the exotic name Glasgova; and here is the station of the railway some way out of the city. The province that takes its name from Irkutsk is rather larger than Transbaikal, but not quite so well populated. It has other towns, such as Nijni-Udinsk and Talanovskoye, which from their position on the railway may soon grow into importance.

In the same government, stretching north of Irkutsk to the Arctic Ocean, and east almost to the Pacific shore, is the huge province of Yakutsk, almost as

Irkutsk on the Angara River. (From a photograph.) In the foreground is the Trans-Siberian Railway

large as half of Europe, with a population not equal to that of many English towns. Its name comes from the Yakuts, whom Professor Keane styles the "most energetic and versatile" of all the Siberian natives, intelligent as well as hardy, and who alone seem to be increasing instead of dwindling away. To their hunting and fishing industries a region rich in minerals is mainly given up, while some of them are wealthy in cattle and horses. Captain Cochrane, that most enterprising of Siberian travellers, tells us how they would wade waist-high in the ice-water, towing his boat; and other travellers have been amazed to find women gossiping, bare-armed, and children running about stark-naked in the open air below freezing-point; indoors they prefer to sit unclothed, basking in the stuffy warmth of an oil-lamp. These "men of iron" had need to make light of cold, for their country seems to have the severest winter climate in the inhabited world, where frost and snow may be looked for in the summer months, even after a scorching day. The coldest town, if town it can be called, is stated to be Verkhoiansk, just within the Arctic Circle, where the New Year may bring down the glass to about 50° C. below freezing-point. This is on the River Yana, flowing north from the Verkhoiansk Mountains, in the centre of the province,

Yakut Woman

a wildly picturesque range that farther east sends down two other great streams, the Indigirka and the Kolima, on which latter river, far into the north-eastern wilds, is the gloomiest circle of the inferno reserved by the Czars for political exiles.[1] To the south of that central range the little city Yakutsk was founded, 1632, on the Lena, chief river of this region, which, rising in the mountains west of Lake Baikal, from the other side of which comes its tributary the Vitim, has a northward course as long as the Amur's. At the city of Yakutsk, in the heart of the province, the river is already over 2 miles wide, and twice as broad in its summer floods, swollen by tributaries as large as the Rhine, of which little more is known than the names; yet to these wilds a railway is projected from Irkutsk. After draining a million of square miles, the Lena falls into the Arctic Sea by a delta sometimes blocked by ice even throughout the summer. Off the deep gulfs of this inhospitable coast the New Siberia group of considerable islands are visited by man only in the short summer.

To the west of Yakutsk another enormous province, Yeniseisk, is formed by the basin of the Yenisei, about as large as that of the Lena, and rather less thinly populated. The chief city is not that called Yeniseisk, but Krasnoiarsk, to the south, one of the most agreeable places in Siberia, with a reputation for refinement not common in this part of the world. The Yenisei is almost as long as the Obi (3250 miles), having, if its affluents through Lake Baikal be taken in, an estimated course of nearly 3000 miles. Its broad flood falls into the sea by a long gulf, open to navigation only for a few weeks in summer, but having one shelter against furious northern gales in Dickson Haven, to which cargoes of grain can be floated down on rafts and boats, there broken up for timber. It was Professor Nordenskjöld who showed the way to this harbour, anticipating in the adventure our English Captain Wiggins, who had already taken the first steamer up the neighbouring Gulf of Obi. Following the lead of these pioneers, a certain amount of precarious ocean traffic is now carried on with the great rivers of Siberia, which, in the case of the Obi and the Yenisei, are connected by a canal, or rather by an adaptation of canalized streams, running through the silent primeval forest, where, once in hours' steaming, may be seen a Siberian hamlet or a tent of wandering Tunguses.

[1] "The temperature of Verkoiansk is seldom less than 60° and is often more than 78° below zero from November till March. Hot water spilt on the ground, any time during the winter, freezes solid in 30 seconds, and metal sears the flesh like a live coal. Strange to say, this region is wonderfully healthy. Pulmonary complaints in Yakutsk and Verkoiansk are almost unknown, and a cold in the head vanishes before you are aware of it. The native huts are heated up to over 80° F., but you can with impunity emerge into 40° below zero without putting furs on. And the cloudless blue sky and bright sunshine that accompany these low temperatures almost atone for their drawbacks."—Mr. Harry de Windt, *Letter to the "Daily Express"*.

WEST SIBERIA

The basin of the Obi, which, with its great tributary the Irtish taken into account, rivals the Yenisei as the longest of Siberian rivers, makes the government of West Siberia. This, as long least inaccessible, is the typical Siberia depicted in books of the past—a flat, monotonous plain, covered by lush grass and woods of white-stemmed birch, cleared off over the fertile belt that now becomes thickly chequered with fields and pastures round the log huts of settlers. To the north these are shut in by thick forest, where only rare clearings have been made about the rivers; then comes the tundra region, home of the rude Ostiaks and Samoyedes, whose kinsmen occupy Northern Europe as far as Lapland.

West Siberia is divided into two provinces, Tomsk and Tobolsk. Tomsk, the most thickly-populated part, lies to the south, where the Obi comes down from the Altai mountain mass that, under various names, curves round two sides of Siberia. The name Altai means "Gold Mountains", and this group is rich in valuable stones as well as metals. Barnaul is the chief town in the highland district, where the Obi is navigable up to Bysk. Farther down, on the Tom, a tributary of the Obi, and reached by a branch from the main Trans-Siberian railway, is Tomsk, the provincial capital, distinguished as the seat of the Siberian University, founded in 1880. This is a place of over 60,000 people and a centre of trade and mining industry. Some twentieth part of this population are Poles, whose Catholic faith binds them together, and they have not yet forgotten the native land from which their fathers were exiled, a fact kept in view by the Russian officials. At least one newspaper is published here, under some difficulties through the careful censorship of the press. Like other Siberian cities this has suffered from fire, also from annual floods on the breaking up of the ice, which destroy life and property without suggesting that Government has more needful business than to keep its subjects from dangerous knowledge.

Tobolsk is a larger province, in the centre of which unite the Irtish and the Obi. Higher up, on a commanding site at the confluence of the Irtish and Tobol, stands the city of Tobolsk, seat of the archbishop, and at one time capital of all Siberia, so that it figured more in former accounts of Siberian travel than it is likely to do for the future. Its tall stone pillar to Yermak the Cossack, first conqueror in this land, seems a monument of its own past, for, being far off the railway, it has not much chance of keeping its old place among Siberian towns. The present administrative centre for this, as well as for the steppe region to the south, seems to be Omsk, at the confluence of the Om and the Irtish, on the southern edge of the province. Now reached, in summer, by an occasional ocean steamboat, Omsk has grown fast, and goes on growing beside the Trans-Siberian railway, whose station, indeed, is a league from the city; but that seems a trifle in a country of such vast distances. Tobolsk has steamboat communication with the now larger Tiumen, on the western edge of the province, which prospers as terminus of a railway from Perm and as a knot of trading routes. It claims to be the oldest town in Siberia, a fort having been built here by Cossack invaders in the sixteenth century, before the founding of Tobolsk and Tomsk. Over these provinces the railway has in a few years called forth a notable production of butter that finds its way as far as London, along with refrigerated game-birds.

We are now on the outskirts of Asia, among the scenes of that "Exile of Siberia", whose adventures found Tobolsk in much the same state as are more

remote provinces at the present day. Irbit, to the north of the Perm railway line, has long been important as a seat of a great fair that in February turns a village to a busy town. Farther west, upon this railway, here joined by a branch to the main line, comes Ekaterinburg, a place about the same size as Tiumen, but more like a European town, that has long prospered through the mining industries of the Ural region, from which come masses of malachite, jasper, jacinth, and other valuable crystalline stones, as well as sparkling gems, among them the rare Alexandrite, that shows crimson and green according as seen by day or night. The cutting and polishing of these is done at Ekaterinburg, a city which in one sense belongs both to Europe and to Asia.

On maps the low barrier of the Ural Mountains is often represented as the frontier of Siberia, and by the road crossing them stands a boundary stone on which one may sit with one leg in each continent; but a western strip of Siberian territory is reckoned within the European-Russian province of Perm. The three border stations on the railway are named Asia, Ural, and Europe. This line from Perm, the first to enter Siberia, has not been used as the great Trans-Siberian route, which runs farther south from Samara on the Volga, having Chelyabinsk, hitherto an unknown little town in the same European-Asian zone, as the border station, where emigrants are taken in charge to be despatched all over Siberia.

A certain confusion in Siberian statistics is caused by that overlapping of continental and provincial limits, still more by the fact of the West Siberian government extending southwards into the steppes of Central Asia, which we must consider under a separate head.

THE STEPPES

The physical, political, and ethnical features of Siberia merge into those of Central Asia, whose characteristics again overflow into Eastern Europe. West of the southern mountain ranges the Siberian plains become the Steppes, which, speaking generally, extend to what is usually called Russian Turkestan. The northern edge of the steppes is attached to the Government of West Siberia and of its European province. Without pausing to go into detail it may be enough to name these border provinces: Semiretchinsk, Semipalatinsk, Akmolinsk, Turgai, and Uralsk; then let us include in a general view the whole of that region whose only natural boundary is a ridge across the steppes, separating the waters of the Arctic Ocean from those which lose themselves in the Aral and Caspian Seas. Fresh features will then be apparent to the south, where among rich oases still exist remnants of old civilization now enveloped by Russian authority.

Steppe is a Russian word denoting the flat or hilly plains which cover this side of Asia, and stretch into Europe, their general aspect a sea of grass, contrasting with the forests to the north, the mountains to the east, and the bare deserts to the south. In some parts they present more variety than is associated with the name; their horizons may be bounded by jagged heights, through whose valleys streams flow down into lakes or strings of stagnant pools that, for want of an outlet, curdle at their shrinking edge into a scum of salt and blight the ground around with an efflorescence like snow, about which nothing will thrive but scrubby heath or stunted bushes. In the water-courses may be hidden oases

of timber, else a tree is so rare a sight as to form a landmark; and the marshy hollows are filled rather with forests of reeds and rushes. On the richer soil all other vegetation is choked off by tall bearded grass, but poorer spots are spangled by the breath of summer with a profusion of rainbow-coloured tulips, lilies, and other blooms, all the brighter at first in contrast with the sere shades of last year's stubble.[1]

The greater part of this region lies low, but it is ill-sheltered from northern winds, so that the climate, while less severe than in Siberia, is one of extremes, great sun-heat being followed by sharp frosts which hold the ground for a longer or shorter time in winter. With the rain-bearing winds of the warmer seas barred by high ranges, the steppes have the Central Asian dryness; and the inland seas, poorly fed by their mountain snows, are undergoing a constant desiccation. In the south of the Russian domain there are large patches of desert such as we saw covering a great part of the Chinese dependencies; but for the present let us confine our view to the grassy plains inhabited by the Kirghiz hordes.

A Kirghiz Encampment

The steppes are often vaguely spoken of as Tartary; and the name Tartar (properly Tatar) is used in the same loose way, having been stamped on European memory through the terror inspired by Genghiz Khan's

[1] The naturalist Brehm, who saw beauty even in the dismal tundra, gives us a pleasant picture of what spring may do for this region. "After a few weeks the steppeland lies like a gay carpet in which all tints show distinctly, from dark-green to bright yellow-green, the predominant gray-green of the wormwoods being relieved by the deeper and brighter tones of more prominent herbs and dwarf shrubs. The dwarf-almond, which, alone or in association with the pea-tree and the honeysuckle, covers broad stretches of low ground, is now, along with its above-mentioned associates, in all its glory. Its twigs are liberally covered all over with blossom; the whole effect is a shimmer of peach-red, in lively contrast to the green of the grass and herbage, to the bloom of the pea-trees, and even to the delicate rose-red or reddish-white of the woodbine. In suitable places the woodbine forms quite a thicket, and when in full bloom seems to make of all surrounding colour but a groundwork on which to display its own brilliancy. Various, and to me unknown, shrubs and herbs give high and low tones to the picture, and the leaves of others, which wither as rapidly as they unfold, become spots of yellow-green and gold. Seen from a distance all the colours do indeed merge into an almost uniform gray-green; but near at hand each colour tells, and one sees the countless individual flowers which have now opened, sees them singly everywhere, but also massed together in more favourable spots, where they make the shade of the bushes glorious."

fierce followers. Ethnologists have no easy task in unravelling the confusion of Asian racial blendings. The so-called Tartars of the East are purer Mongols, showing the rounder, broader, less-bearded faces which we associate with a Chinaman. As one passes westward into Turkestan these features become modified among the Turki tribes, in which there seems to have been some mingling of Caucasian with Mongol blood. Not less marked is the change of religion, Mohammedanism now taking the place Buddhism held among the Tartars of the East. The largest of the Moslem races is the Kirghiz, who, to the number of some three millions, inhabit the steppes, divided into three hordes, and sub-divided into many tribes, with their khans or chiefs all paying allegiance and tribute to Russia, under whose military rule, dominating their own patriarchal institutions, they are now peaceable enough, though the name Kirghiz is said to mean robber, and a turn for horse-stealing still testifies to a strain of that old character. The larger part call themselves Kazaks, which appears to be the same name as Cossack; another division, dwelling rather in the highlands, are known as the Kara (*black*) Kirghiz. Like their half-brothers of Mongolia, the Kirghiz are little concerned to till the soil, for the most part ill-fit for tillage. Almost cradled on horseback, they move about the steppes, now on the wide plains, now up the moister mountain slopes, seeking the best pasture for the flocks in which consists their wealth. Horses are their most prized possession and standard of value, a rich man owning thousands of them, fed in separate herds, while he is poor indeed who does not have at least half a dozen. They keep great flocks of sheep and goats, the former of that fat-tailed kind which sometimes require a little cart to support such a burdensome appendage, the latter long-haired, commonly white with black markings. Both are herded together under the charge of lads, who often ride oxen and can stir these heavy steeds to a surprising pace; but cattle do not figure so much among the stock of the Kirghiz. Some have flocks of camels, and all keep dogs to help in the herding, which here begin to improve from the savage curs of the Far East into that intelligent and faithful companion of man known in Europe. From the wool of sheep they make the felt that walls their tent dwellings; the long hair of the camel and the goat are woven into cloth and trappings, and horse-hair into cords and reins. Sheep-skins as well as wool come in for dress in the cold winter; the hides furnish whips, thongs, leather bottles, and the big boots worn by the Kirghiz under their long robes and thick head-dresses. Their food is chiefly milk and meat, the milk of all their animals being used; that of sheep and goats turned into curds, cheese, and butter, and that of mares and camels fermented into the *koumiss* or milk-wine which has been introduced to Europe as a strengthening beverage. Something like it is, or used to be, drunk in the Orkney Islands under the name of "bland".

By selling the surplus of his herds and their produce the owner provides himself with means to pay taxes to the Russian authorities, to buy firearms, iron for fashioning into blades, silver for their adornment, and to deck out his smoky *yurt* with a show of costly rugs, beautifully embroidered silks, and quilted bedding. Sometimes, besides these movable tents, he has a fixed home, built commonly of plaited willows or reeds, where he passes the winter with a stock of hay to help his flocks through the lean months that may starve both man and beast in severe seasons. So long as things go well with him he lives in rude plenty, loving horse-races, wrestlings, the plaintive minstrelsy which is his unwritten literature, and jovial wedding feasts when a young man's family has

beaten down the price of a maid to the number of horses she seems worth. The marriage ceremonies are elaborate, showing traces of heathen customs now overlaid by Moslem rites, though mosques and mollahs will not be met with every day on the steppes. At funerals, to which neighbours may be summoned from 50 miles around, the master's favourite horse has its tail cut, and a year later, when the period of mourning is ended, comes to be slaughtered at his grave, which in the case of a great man may be covered by such a dome of wood or brick as in some parts forms a frequent landmark on the loneliness of these plains.

The steppes have wild animals as well as tame ones. They abound in beautiful birds as well as in vipers and other venomous reptiles, and in burrowing

Kirghiz setting out for a day's sport with Falcons

creatures like the pretty and shy jerboa that steals out only by night, jumping along in jerks so as to suggest a tiny kangaroo, with cautious eye for the eagles and hawks that have a sharp eye for him. The great golden eagle is trained by the Kirghiz, as by other hunters of Asia, to serve as a falcon, flown at foxes, even at wolves that haunt the reed thickets, where the boar keeps company with wild fowl. On the steppes and their hills may be sighted fleet antelopes, herds of the *koulan*, and the great huge-horned argali wild sheep. Fierce beasts of prey are rare, but the steppe has two frequent plagues in its clouds of mosquitoes and ravaging swarms of locusts.

The region of the Kara Kirghiz, though included in the Steppe government, should rather go with Turkestan, unless in respect of its being an older Russian conquest. At the corner where meet China, Siberia, and the Steppe region there is a fine country of lakes and mountains, drained into Lake Balkash, the "Denghiz" or sea, as it is also called, whose slightly brackish waters stretch for

over 300 miles between the provinces of Semipalatinsk and Semiretchinsk. So far from being overflooded by the rivers that pour into it, this appears gradually to be choked up with their detritus, as it is known to have been once far more extensive. The chief of these feeders is the Ili, flowing from mountains to the south-east, where, says M. Reclus, Central Asia has no such magnificent scenes as those at the foot of the glaciers crowned by Khan-Tengri, "King of the Heavens". The upper part of the Ili valley, as we saw, is Chinese territory, having been restored by Russia after a temporary occupation during Yakoub Khan's rebellion. The lower part and all the "Land of Seven Rivers" form one of the richest of Russia's Asian possessions, as yet having some million inhabitants, a medley of Khirghiz and Kalmucks, with Chinese traders and Russian settlers, who make Semiretchinsk the most populated of the Steppe provinces, to which, indeed, it only half belongs in natural characteristics. Vernoye is the capital, a town lying in an agricultural district between the Ili and Lake Issik-kul towards the southern border, on which lake the town of Karakol has been worthily renamed after the Russian explorer Prejevalsky. At the north-east corner, under the Ala-tau Mountains fringing Zungaria, lie the beautiful Lake Ala-kul and other outlying fragments of Lake Balkash, in which direction Kopal makes a place of some note among the Kirghiz camps. But it is on the fertile lands of the Ili we may expect to hear of new towns springing up, perhaps to become as famous in Asian history as once were Kuldja and others that are now half-forgotten ruins. The mountains appear to be rich in various minerals.

Semipalatinsk, to the north of Lake Balkash, has a capital of the same name built on the Irtish, near the border of the Tomsk Province. Thence, dotted here and there by small settlements that as yet are little more than Russian forts, the other Steppe provinces stretch away westward to the Caspian Sea, before touching which they are broken by a line of hills that continue the Ural Mountains to the Aral Sea.

A railway line, passing over the Steppe provinces, is to be made between Tashkend, capital of Russian Turkestan, and Orenburg on the European border, whence there will be a connection with the Trans-Siberian line, the whole forming a net-work of conductors for the military power of Russia, while the burden of these costly enterprises should have the effect of binding her over to keep the peace at least till her new acquisitions have become more profitable than they are at present.

RUSSIAN CENTRAL ASIA

The vast Steppes, whose vigorous and numerous communities seem to be held in solution, as it were, by the Russian empire, form a transition between Siberia and the more varied aspects of Turkestan, to which applies much of what has been said above as to race and climate. The whole of what is known as Russian Central Asia, including the Steppe provinces, measures about 1500 miles from east to west and 1000 miles from north to south, with a population of five or six millions, increased by two or three millions if we take in the enclosed dependencies of Khiva and Bokhara. The chief Turki stock in the south are the Usbegs, the most civilized people of central Asia, who alone possess something like a literature, and among whom still exist monuments of an historic

past. These have blended with Iranian blood, forming the mixed race called Tajiks; and the name Sarts is much used for the settled inhabitants of towns. The most warlike race are the Turkomans on the Persian border, descendants or heirs of the ancient Parthians, with whom the Russians have had hard fighting as the Romans had with their ancestors. The conquest of this domain is in the memory of the last generation. It cost Russia dearly in money and lives, but it seems to be complete so far as concerns the wild warriors, who can respect foemen worthy of their steel, while the enveloped khanates are at present allowed to remain under their native sovereigns, overshadowed by such a protectorate as we exercise over once-powerful kingdoms beyond the Himalayas. The Russians show little desire to supplant native institutions by their own customs or religion; and the conquered subjects are left to choose local magistrates, who manage in minor matters much as they please, under the absolute control of military governors.

The southern part of Russian Central Asia is divided into the two provinces of Turkestan and Transcaspia, separated by the khanates Khiva and Bokhara. The general characteristic of this region is that its waters drain into brackish inland seas or are swallowed up by the soil which they exhaust themselves in fertilizing. The climate is still one of extremes, the snows of winter coming as a welcome relief to travellers on waterless plains baked by a fiercer sun than thaws the Siberian ice. The monotony of the Steppes here becomes a more broken configuration of mountain and plain, but most of the plain is desert sand always threatening to encroach upon the fertile oases, which incessant labour keeps green by economizing and directing the flow of the streams that to a great extent are thus spent before losing themselves in the thankless wilderness. The two chief rivers, famous of old as the Oxus and the Jaxartes, are the modern Amu-daria and Sir-daria, which, rising in the Central Asian mountain group, find their way north-westward to the Sea of Aral, now entering it at the south and north ends respectively. These rivers, and others of the region, have repeatedly changed their course, so that an ancient bridge may be seen high and dry on the desert, and dusty desolation has overtaken the ruins of fortresses, shrines, and caravanseries in what once were flourishing oases.

The salt Sea of Aral, in spite of such affluents, goes on shrinking within its old bounds. It is at present about as large as Belgium and Holland put together, but on the east side has become little better than a flooded marsh, always tending to dry up into sand, while small islands emerge from its shallow bed, that may have been smaller in ancient days when the Oxus is supposed to have run into the Caspian Sea. This, still the largest of salt-water lakes, at a lower level than the Aral, receives the Volga, the greatest river of Europe, and others, which are slowly filling in with their silt what was once the end of a West-Asian Mediterranean, like that we have seen traced in the desert depressions of the East. The two seas are separated by a barren waste, over which, by canalizing an old river-bed that runs part of the way, the Russians have proposed to open a communication between the two.

Without too much concerning ourselves with administrative nomenclature and boundaries that seem not to be firmly fixed, let us visit these new acquisitions of Russia, as far as possible, along the line of the Trans-Caspian railway, by which she has lost no time in consolidating and preparing to extend her authority. Till recently this made an adventurous journey, undertaken by Europeans at the

peril of their lives. But some few years ago Mr. Perowne, the well-known tourist-agent, led a large English party to Samarkand, everywhere received with a hearty welcome on the part of the Russian authorities, who have not always proved so hospitable to travellers spying about the remote borders where Russia is credited with studying approaches to a neighbouring empire. Foreigners have everywhere to get permission to enter these Asian territories of the Czar, to which it is hoped that railroads will restore something of their old commercial prosperity, whose springs began to dry up centuries ago, through the diversion of trade by ocean routes between Europe and Asia.

TRANSCASPIA

The starting-point of the Trans-Caspian line, more than once changed, is now at Krasnovodsk, on the eastern shores of the Caspian, reached by twenty hours' crossing from Baku, whose famous oil-wells supply a cheap fuel for the locomotives, that at some points have to be provided with water by storage

Station at Krasnovodsk, starting-point of the Trans-Caspian Railway. (From a photograph)

in large tanks. The carriages, Mr. Perowne assures us, *en connoisseur*, are comfortable in their up-to-date arrangements for sleeping, eating, &c., and more roomy than on most European lines, all the Russian railways having a broad 5-feet gauge. Skirting the Balkan Bay of the Caspian, with mountains on either side, the traveller soon catches sight of the desert, not at first the hopeless, sandy waste, but a brown alluvial soil that to make it fertile needs only the element here so valuable that the railway carries tuns of water distilled from the Caspian Sea, to supply its employés at their lonely posts. Every prospect shows how man, beast, and plants depend on this one need, so significantly illustrated by the Persian word for water being the root of that which means culture or civilization.

The line runs along the foot of the Khorassan range, the "Edge of the World" as the Persians call this borderland of their country. On the other side

opens out the great Kara-kum, "Black Desert", the bed of a dried-up sea, stretching dismally away to the Oxus oases, with an area great as that of the British Isles. Its worst parts are described by Lord Curzon as a perfectly level expanse, plastered over with sun-cracked and blistered marl, or with a thin layer of crystalline salt so hard that a camel hardly leaves the print of its heavy foot, and the mountain torrents, unable to pierce this crust, dribble away in pools on the surface, sometimes broken also by billowed and rippled sand-dunes, beneath which lie lost the bones of unhappy travellers. "Ever and anon a solitary sand-column, raised by a passing puff of air, starts up, and, giddily revolving on its fragile axis, whirls away over the plain." Here and there may be seen circular or oval tumuli, probably monuments of the dead, or the black encampments of the Turcomans, who up to our time lived mainly by plundering and enslaving their neighbours with such cruelty that the strongest Russophobe must admit almost any change of masters to be for the better. Commerce was carried on at much disadvantage here, when any caravan that attempted to slink by the edge of the desert might indeed reach Khiva or Bokhara, but only to be sold, men and goods, for the benefit of ruthless capturers. On the Caspian, too, the Turcomans played the pirate as the robber on land, and pushed their rapid raids far into Persia. All now bound to keep the peace, while their martial tastes may still find scope in the military service of their conqueror, some of them remain pure nomads, with the desert for their roomy home; others are settled in *auls*, villages of round-roofed felt tents, in the oases, which have been made fertile by slave-labour of kidnapped Persians and Afghans. The Turcoman had his good points, like other bold Ishmaelites: if he robbed, he did not cheat; he was hospitable as well as truthful; he cherished the trusty courser, on whose swiftness he must depend for life and living at the expense of his victims; and he has shown the common-sense merit of knowing when he was hopelessly beaten; but, under the yoke of civilization, his simple virtues are said to be corrupting through drink and opium as much as by the loss of proud independence. As a gentler trait of character, these people are passionate chess-players, who on the railway may be seen provided with chequered handkerchiefs and wooden pieces to take any opportunity for their favourite game.

Outside the oases what flourishes best is the deep-rooted shrub called saxaul, whose gnarled, brittle, but hard wood, economized as charcoal, makes the fuel of the desert. With hedges of this, and of wild oats, the railway has to be bordered to keep it from being snowed up by sand, yet often the trains are blocked for hours, or delayed by the breaking down of bridges in summer floods. At the best the pace is under 20 miles an hour on this line. Under the mountains it strings together stretches of more or less reclaimed land, on which the Tekke-Turcomans, once the most formidable tribe of this people, begin to take to more industrious courses. In their high sheep-skin busbies and long, dressing-gown robes, these doughty warriors cut a formidable figure, yet it is hard to realize how their country, only a quarter of a century ago, was scene of that desperate struggle, ended by General Skobeloff's slaughter of thousands in Geok Tepe, a gigantic earthen stronghold, two or three miles in circuit, by the ruins of which the railway runs; and a large cotton-mill makes another sign of changed times.

Beyond this comes Askabad, the Russian capital of the province, a new town with already 10,000 people, but it has a bad name for being dull and unhealthy. The life-giving waters, where not turned to profit, are, over this region, apt to spread into fever-breeding marshes and stagnant pools; and the

Russian army has probably lost more men by disease than in the fierce struggle of the conquest. From Askabad a great trade road runs over the mountains to Meshed, in the north of Persia; and now the Russians have marked out a railway branch in that direction. The main line keeps on below the mountain frontier for some hundred miles, then bends eastward towards Merv, crossing the Tejend River, which flows from Afghanistan to lose itself in the desert sands. To the south here lie two considerable oases, Sarakhs on the Tejend, and Pendjeh on the Murghab River farther east. Leaving the mountains, the railway traverses a waste plain to gain the northern oasis, or group of oases, that takes its

Strolling Musicians, Merv

name from Merv. Hence the Russians have pushed out a branch southwards towards Herat.

Merv, the classical Margiana, most famous name in this province, "Queen of the World" as its people fondly called it, owes its fertility to the River Murghab, that, pouring down from the Afghan mountains, exhausts itself in watering these oases, and runs out in the sands beyond, whereas once it struggled on to the Oxus. Here was repeatedly built and ruined a great city, first dimly dating from the days of Zoroaster, next from those of Alexander the Great, who left so many traces of his presence in this part of Asia; then by Arabs in the flush of their fanatical career, and again in the sixteenth century by Persian reconquerors. This was destroyed more than a century ago by its neighbours of Bokhara, and now, where the very soil has gone to dusty ruin, exists only as leagues of crumbling walls and shapeless mounds, conspicuous among them tombs of the first Moslem conquerors. Tired of so many vicissitudes, after vainly looking round for succour, in 1884 Merv quietly submitted to the advancing Russians, who have given it order and peace from the robber raids, recalled by

fortified enclosures and white watch-towers dotting the hills. The fortress of the Tekke-Turcomans, thus surrendered, was a huge earthen citadel like that of Geok Tepe; and here, on the Murghab, the Russians have built New Merv, 10 miles from the old city. This place seems destined to fresh prosperity, along with the surrounding oases, where the Russian Government has improved the irrigation system. The town has a market in which thousands of people gather to deal in horses, camels, and sheep, but no longer in human cattle. Trees, hitherto rare and small along the line, flourish in the gardens of Merv, celebrated for their melons and grapes. The Russians are endeavouring to introduce wine-making, and the more prosaic culture of cotton has taken strong root. The most notable native manufacture is of the Turcoman carpets, which have become well known in Europe.

With the exception of such favoured spots as Merv, Transcaspia is a poor and thinly-populated country; but its mountains contain asphalt, coal, sulphur, and other minerals, while efflorescent parts of the plain yield a crop of salt to supply a profitable trade. One of the chief imports is that universal Asian luxury tea, brought both from China and from India. On the south-east the province merges with Afghan Turkestan, through whose mountains run old trade routes by once-famous cities which firm order and peace might restore to prosperity.

THE PROTECTED KHANATES

Having passed through the broad oasis of Merv, that extends for 40 or 50 miles beyond the river, the railway traverses another stage of desolation, where for some 100 miles the sand has been driven into *barkhans*, round-backed and sharp-edged sand-hills, curving over like breaking waves, and blown off into a spray that almost burns the skin exposed to the pestiferous hot wind of this desert. But such a forbidding prospect is succeeded by richer scenes, when, bearing north, the line enters the Khanate of Bokhara, the classical *Bactria*, across its main life-giving artery the Amu-daria, whose bed, partly filled up by sand-banks and islands, requires here a bridge over two miles long.

Bokhara, land of the Usbeg Tartars, is ruled over by the native emir and his begs in each district, but a Russian resident at the capital keeps them from forgetting how this quasi-independence hangs upon conforming to Western ideas so far as to abolish barbarous cruelties, such as the slavery which till lately reigned here unchecked. The city of Bokhara, through which the railway passes, stands not upon the Amu-daria, but on what was once a northern tributary, the Zarafshan, "Scatterer of gold", whose precious current, like the Murghab's, becomes spent in giving life to the fruit-gardens, cotton plantations, and crops, that make the richest show of verdure seen on the journey from the Caspian. The rest of the country—a curved stretch of some 93,000 square miles, with a population of 2,000,000 at most—is watered by affluents of the Amu-daria, which on its south side forms the Afghan border. In vain the Zarafshan now struggles to reach this more powerful flood. It disappears in the salt marshes and thin pastures about Karakul, where feed those curly and silky-haired lambs whose wool is known to us as astrakhan, a name imposed by the Caspian port through which this fur came into Europe.

"Bokhara the Noble" had long been a centre of Moslem culture, and one of the great marts of Asia, from which enterprising traders led their caravans far

and wide. It is still a city eight or nine miles in circuit, its mud walls containing under 100,000 people, mostly of mixed race, among them a community of Jews, who have to submit to humiliating restrictions; and there are also Hindoos from India. A new Russian town is growing up about the station, several miles from Old Bokhara, where the principal building is the Ark or palace citadel, dating from the ninth century, whose high brick walls crown a height in the middle of the town. The emir seems not to love this imposing residence, for besides his summer palace outside the town, he has a new stone mansion built by a German

Melon Market, Bokhara

architect near the station, where the Russians probably find it easier to keep an eye upon their vassal. Other lions of the place are the Great Minaret, nearly 200 feet high, from which criminals used to be hurled headlong, and beneath it the chief mosque and medresse, or college, their domes covered with blue-glazed tiles. There are hundreds of mosques, tombs, and shrines, whose enamelled decorations have mostly fallen into sad disrepair, and of endowed colleges or schools which still attest Bokhara's old reputation for learning; but fragments of decayed magnificence are but poorly set in the maze of mud walls and mean streets swarming with turbaned men and veiled women. A picturesque mingling of riches and poverty, of dirt and splendour, make this a typical Eastern city. Not the least interesting sight is the crowded market-place, containing thirty or forty bazaars for each branch of trade, with many caravanseries for the accommodation of merchants and their goods. Bokhara's chief business is as

a distributing centre for all the wares of the region; but it has a specialty in the manufacture of the embroidered silks made here from its celebrated mulberry-trees; it is also noted for gaudy velvets spangled with gold and silver to form sumptuous trappings for horses. It has a bad point of celebrity in the *reshta*, a worm nursed in the water, producing in the human body a painful sore very common, and dangerous if the parasite should break in the gradual process of extracting it. Leprosy and other skin diseases are also common, the lepers having a separate quarter outside, where they are allowed to appeal to charity by a disgusting exhibition of their sores. In this country of glaring sand and sun the people suffer much from ophthalmia.

To Englishmen the city has a sombre interest in the fate of Colonel Stoddart and Captain Conolly, the British envoys, done to death here in 1842 after a cruel captivity. Their fate was ascertained by the eccentric Dr. Wolff, who boldly made his way to Bokhara dressed as an English clergyman, and perhaps came off safe through the respect paid by Moslems to a supposed lunatic. Later on, Arminius Vambery ventured to Bokhara in the disguise of a mendicant dervish, overcoming suspicion through his extraordinary linguistic skill and knowledge of Turkish scriptures. The gloomy fanaticism that long veiled this country now seems to be giving place to indifference, the fire-water of the infidel, if all stories be true, proving the most potent solvent of orthodoxy. One element of prosperity the Bokharians have lost in the slaves, by whose labour their fields and gardens were brought to such fertility. Till the Russians abolished this trade, Bokhara and Khiva were principal markets for the victims of Turcoman raids, chiefly into Persia, whose people, belonging to the Shiah sect, the Sunnite slave-catcher counted it a pious duty to hunt down. To enslave a true believer is indeed a sin; but when the Turcomans caught a Sunnite in their net, they might torture him into professing the other version of Mohammedanism, so as to be able to sell such a heretic with a good conscience. A large proportion of slaves, even if, after years of service, they obtained their freedom, as might happen, never went back to their own country; and thus the population has become much blended with foreign blood. Russians, too, not infrequently found their way into Turcoman slavery up to a generation ago; and horrible atrocities, such as flaying and burying alive, used to be inflicted with impunity on hapless captives of the race now masters here.

Bordering on Bokhara to the west is the smaller Khanate of Khiva, a strip of cultivation some 200 miles long by 140 broad, on which a few hundred thousand people live through the drawn-off waters of the Amu-daria. The city of Khiva, whose towers and cupolas seem monuments of bygone greatness, was at one time much in men's mouths, when the Russian advance in this direction inspired adventurers like Burnaby to daring visits. Mr. Jefferson, who recently made a "new ride to Khiva", with, rather than on, a bicycle, reports of it as hardly worth the trouble of coming so far to see, its mud walls crumbling away, and its fields often degenerating into malarious morasses round the fortified houses and towns that tell of a troubled past. In places, indeed, the soil is still rich, apples, mulberries, peaches, grapes, and other fruit flourishing in the gardens, whose melons are particularly renowned, as the peaches and grapes of Bokhara. The chief export is cotton, and the chief manufacture the glazed bricks that make a striking feature in mosques and other shows of Turkestan architecture.

Khiva has quietly dropped out of European interest; and the Russians, after burdening the country with a heavy war indemnity, are for the present content to overawe it by two border fortresses, leaving to its native rulers a watched independence, as in the neighbouring protectorate. But less than Bokhara has Khiva a chance of recovering itself, since it stands out of the way of the railway, reached only by difficult caravan routes through the surrounding deserts, or by boat travel on the river. To the west it is separated from the Caspian by the Ust-Urt plateau, and by a lower waste where the old bed of the Oxus has made deep furrows and tall lines of shell-encrusted cliff mark out former limits of that great inland sea. To the north the Amu-daria now reaches the Aral through far-spread mouths, where

> "For many a league
> The shorn and parcelled Oxus strains along
> Through beds of sand and matted rushy isles".

It is the railway line that brings the tide of civilization to those morally-withered lands; and to that main current of traffic let us return.

RUSSIAN TURKESTAN

Northwards from Bokhara, having crossed this khanate, the Trans-Caspian railway soon enters the new provinces, by whose rapid conquest the "White Czar" has turned the tables on memories of Attila and Genghiz Khan. The first of these is the Zarafshan or Samarkand country, which the Russians cut off from the dominions of the emir, giving him back in exchange two small revolted districts which they had easily subdued; and as here they have in their hands the upper waters of the river that gives life to his capital, they could at any time, by damming them up, bring that vassal neighbour to blighted submission. The Russian province, watered throughout its whole length by a thousand irrigating canals from the Zarafshan, has an area about equal to that of Greece, and a population of only a few hundred thousand; but the extraordinarily fertile soil, sometimes bearing three crops in the year, promises a quick increase. Under its new masters this land may regain its former greatness, when Samarkand, a city then second only to Peking in old Asia, was the capital of that renowned Tamerlane or Timour the Tartar, buried in a dilapidated mausoleum, whose blue dome rises between the old and new towns into which the place is divided, as at Merv and Bokhara.

Old Samarkand contains many other impressive structures, much shaken by earthquakes, which appear to have thrown its minarets out of the perpendicular, though here is repeated the controversy of the Leaning Tower of Pisa, as to whether this were not the design of the construction. Through the dark, crowded streets, encircled by blooming gardens, the Russians have cleared broad approaches converging upon the central Righistan, or market-place, which, with the monumental religious edifices enclosing it, Lord Curzon pronounces the noblest square in the world.[1] One mosque, built by Timour, is called the most

[1] "I know of nothing in the East approac ng it in massive simplicity and grandeur; and nothing in Europe save, perhaps, on a humbler scale, the Piazza di S: Marco at Venice - which can even aspire to enter the competition. No European spectacle indeed can adequately l compared with it, in our inability to point to an open space in any Western city that is commanded on three of its four sides by Gothic cathedrals of the finest order. For it is clear that the *medresse* of Central Asian Mahometanism is both in its architectural scope and design a lineal counterpart and forerunner of the minster of the West. Inst l of the intricate sculpture and tracery crowning the pointed archways

beautiful in Central Asia; and there are three great *medresses*, once beautified by glazed brick, which makes the favourite ornamentation, turquoise blue being the prevailing colour. Here, as in Bokhara, many schools are still kept up for Mohammedan teaching. Samarkand also has an imposing palace citadel. Outside of the town is shown a tomb called Daniel's, a surprising sight to sound Protestants who may have fancied they had a monoply of scriptural personages. Many such shrines, falling into ruins, form a setting for the Russian town that is growing up in the shade of park-like trees, so as to appear "a bouquet fallen on a green carpet", as it struck a Western traveller. Standing higher, and traversed by channels of running water, this has a better name for salubrity than other oasis cities. The population is stated at 55,000, a figure likely to increase if Samarkand goes on flourishing at the expense of Bokhara, hitherto its commercial superior.

The country around, in its varied aspects, illustrates the Oriental hyperbole that describes these oasis homes as "jewels set in sand". The strong contrast between the desert and its islands of verdure has cast over Eastern eyes such a glamour as readily enchanted any garden-set town into a paradise, a charm well illustrated by one of M. Bonvalot's experiences. "Reaching a height, we perceive the green bar of the oasis, from which issues the river twisting like a thin white streamer, then loses itself in the grayish steppe that stretches without bound. One might believe one's self on the edge of the sea. An optical delusion, produced by the setting sun, transforms the entire oasis into a single city covered with noble buildings; the poplars seem lofty minarets, the clumps of shrubbery, cupolas of mosques, and the meanest building becomes a palace. It is the Samarkand of the poet's dreams. It is an image of the East, where, under the most splendid appearances, is often hidden the dullest reality." Here, we may remember, was the scene of the Arabian Nights' story-telling; and among the crops that flourish in the oases is the sesame of Ali Baba's experience, much used for the production of oil, extracted also from cotton-seed, linseed, and others.

The railway goes on eastward into the valley of the Sir-daria, where it forks, the left-hand branch leading north across the river to Tashkend, chief town of the Sir-daria, the largest and best-populated province of Russian Turkestan. Though this, as it stretches westward to the Sea of Aral, includes a large proportion of desert and "hungry steppe", it has much rich loess soil needing only irrigation from the river and its tributaries to bloom like a garden with crops and fruit, and to support great herds of stock, as it did for Greek colonies of old. During the last thirty years Russian towns and villages have been quickly springing up to take the place of half-ruined fortresses and bazaars, the dwindling remains of past greatness; and now that the railway opens markets for its produce, Sir-daria may be expected to increase by leaps and bounds, unless the Russian colonists let themselves degenerate to the native level. Another benefit bestowed by the conquerors is the planting of trees so as already to affect the dry climate. The rainfall at Tashkend is said to have doubled since the growing up of the fine avenues that adorn its streets.

of the Gothic front, we see the enamelled tiles of Persia, framing a portal of stupendous magnitude. For the flanking minster towers or spires are substituted two soaring minarets. The central lantern of the West is anticipated by the Saracenic dome, and in lieu of artificial colour, thrown through tinted panes, from the open heavens shine down the azure of the Eastern sky and the glory of the Eastern sun. What Samarkand must have been in its prime, when these great fabrics emerged from the mason's hands, intact, and glittering with all the effulgence of the rainbow, their chambers crowded with students, their sanctuaries thronged by pilgrims, and their corporations endowed by kings, the imagination can still make some endeavour to depict."

Tashkend stands on a tributary of the main river, flowing down from the mountains that cover the south-east corner of the province. This has long been a junction-point of caravans between Europe and Southern Asia, and now, with a population of over 150,000, a considerable proportion of them Russians, it is the most thriving city in Central Asia, and seat of the Turkestan general government. Old Tashkend lies in ruins 15 miles to the south; the city that has taken over its name is itself, however, one of some antiquity. Like others of the region it is mainly built of small flat-roofed mud houses, frequent earthquakes being unfavourable to more ambitious architecture; but these are so set in roomy gardens, avenues, and water conduits that the place covers

Moscow Prospect, Tashkend. Drawn from a photograph

as much space as a European city of ten times the population. The Russian quarter, only a generation old as it is, shows regular streets radiating from an open square enclosed by European houses, shops, and public buildings, so as to make on Dr. Schuyler the impression of a brand-new American city, but for the absence of bustle. There is a museum, in which the Russians are forming an interesting collection of archæological relics gathered from a land that has known many masters both before and since it fell under the sway of the great Alexander; it still shows traces of the Nestorian Christianity rooted out here by conquering Islam.

A hundred miles or so below Tashkend, on the Sir-daria, is the city of Turkestan, with some 12,000 people; still lower down other places are springing into the rank of towns, which a generation ago were known only as Fort 1, Fort 2, and so forth, on the troubled route from the Aral Sea. To the north of the river a mountain ridge divides its valley from the Steppes. On opposite sides of this ridge lie Chimkend and Auleata, places of some importance as being on the post-road that runs on by the Alexandrofsky Mountains and the basin of the Chu, flowing out of Lake Issyk-kul, into Semiretchinsk, which,

though counted among the Steppe provinces, belongs naturally, so far as its mountain half is concerned, to the Turkestan region, its valleys and oases fertile in fruit and grain, cotton and tobacco.[1] As already mentioned, the Russians propose to nurse this rising prosperity by a railway across the Steppes from Orenburg to Tashkend, connecting their Trans-Siberian and Trans-Caspian lines.

Up the valley of the Sir-daria, the right fork of the Trans-Caspian railway has been pushed into the Russian province of Ferghana, the ex-Khanate of Khokand, about as large as Portugal, shut in on all sides but the west by wild spurs of the Tian-Shan range, whose streams so enrich the fields and pasture slopes of this valley that it is the most thickly populated of the Russian territories. The climate is said to be more equable, with milder winters, than in less sheltered parts of Turkestan. The mountains are reported rich in minerals; and the brass and other smith-work of the Khokand bazaars is notable; there is also a considerable trade in furs brought down by the hill-men. As to the productions of the soil, among which cotton seems to be taking the lead, to enumerate them would only be repeating what has been said of other oasis lands. Some parts of the valley are watered only too well, for the eager Sir-daria, here pent up in a narrower channel, is apt in the season of flood to brim over, forming unwholesome morasses. But Ferghana, like the other provinces, suffers from the diswooding of its mountain slopes, which once attracted a more diffused rainfall.

Khokand, the capital, a city of over 80,000 people, being comparatively modern, appears to be better built than the older towns, and the ex-khan's palace citadel is called by Dr. Lansdell the finest native structure, not of ancient date, he saw in Central Asia, while its great bazaar is said to be the largest of this region. The conquerors found it an insanitary place, infected by fever and by goitre, probably the effect of the water, so the Russian head-quarters have been moved to Marghilan, below the southern mountain range. Before reaching Khokand the railway passes through the older Khojend, then it has its terminus at Andijan, which of late suffered sorely from an earthquake. Northwards from the line, on the Narin, Namangan appears to have grown to a population of 60,000. At Marghilan, renowned for fruit, the Government has formed a nursery of trees from which it may succeed in grafting prosperity over the whole province. Coal has been found in this vicinity, which, if sooner available, might have saved reckless destruction of forests in the past. Naphtha springs and precious stones are also among the resources of Ferghana, that seems one of Russia's most hopeful possessions in Central Asia.

The Sir-daria, known in its upper course as the Narin, comes down through romantic gorges from the mountains filling in the head of this valley. The lesser waters of Turkestan rise beyond the Alai Mountains to the south of Ferghana, where the great Tian-Shan range, covering more ground than all the mountains of Europe, knots itself with the other main chains of Southern Asia in the mass of lofty table-lands known as the Pamirs.

[1] A recent correspondent of the *Nation*, Mr. Frederick Wright, tells American readers how "the salutary influence of the Russian occupation is everywhere seen throughout this region. Besides the large settlements of civil and military officials in the cities, thrifty villages of Russian peasants are scattered all along the post-roads. These rarely contain less than a thousand inhabitants, and present every appearance of great prosperity. In them all the tasteful Greek church is a prominent centre. Tall trees line all their roadways. At this season of the year (the beginning of October) immense stacks of grain surround their yards, and all hands are busy in threshing and winnowing it; while swarms of healthy flaxen-haired children everywhere enliven the streets."

THE PAMIRS

"The Roof of the World", as it is called with awe by the surrounding natives, used to be geographically styled the Pamir, a word meaning an upland plain. Recent explorations, however, have shown that this region consists rather of a succession of such plains, at a mean height of 12,000 feet or more, enclosed and intersected by mountains often twice as high, the whole extent of some 30,000 square miles forming a western continuation of the Tibetan table-lands. The Great Pamir, the Little Pamir, and other broad valleys are distinguished as walled off from each other. Sir Francis E. Younghusband, who has done so much for our knowledge of them, explains the Pamirs as old glacier beds partly choked up by the detritus of the mountains, which their ill-fed streams have not force enough to carry onwards. Hot springs here and there burst out under the shadow of the glaciers still formed in the higher valleys of this cold and dry mass of land, their melting discharged, chiefly into the Oxus, in torrents poured down through gorges and ravines, by which the western side is more broken than the higher eastern edge.

Ovis poli shooting in the Asian Highlands: "Dead!"

Politically, the Pamirs, meeting-place of three empires, as also of Afghanistan, have been looked upon as a "No Man's Land", though the Chinese once made claims to sovereignty here, and of late the Russians have shown a disposition to treat the country as a preserve of their own. The Boundary Commission, brought about by chronic disputes, has, indeed, given the greater part of the ground to Russia, leaving the southern trough, called the "Little Pamir", as a sort of neutral zone between this power and the truculent hill-tribes who dwell about our frontier.

Unless to mask advances upon neighbouring territory, the Pamirs are of little value to any power. The only inhabitants, beyond Russian military posts,

are scattered Kirghiz herdsmen, who in summer find pasturage on the less barren parts of these treeless and townless plains. They have seldom been visited by Europeans unless for exploration or in search of their great game, the *ovis poli*, a wild sheep as large as a donkey, with magnificent curled horns that make a proud trophy for the sportsman. The climate is, of course, very severe, fifty degrees of frost being common in winter; and though the lowest levels almost equal the height of the Alps, the scenery to a great extent wants striking features, the bare, bleak valleys being enclosed often by monotonously rounded hills which Sir F. E. Younghusband dismisses as "ugly heaps of rock and earth". Some grand prospects, indeed, open up around lakes here and there filling the hollows, the largest of them Kara-kul, "the black lake", which has no outlet. The Little Kara-kul, on the eastern edge, is a beautiful sheet of clear blue water, from whose shores two magnificent mountain peaks rise over 25,000 feet, Mustagh-ata, "Father of ice", believed to be the highest point, and that other discovered and named Mount Dufferin by Mr. Ney Elias. Another notable spot is the Rang-kul, or Dragon Lake, where a cave has long made a sacred wonder for the Buddhist world, lit as it is by a mysterious gleam believed to shine from a diamond in the head of a mighty dragon that guards the treasures buried within; but Captain Younghusband dissipated this myth by climbing into the hollow and finding the light to be a natural reflection through an opening covered with some white deposit.

The same traveller, in whose *Heart of Asia* we have one of the best accounts of the Pamirs, presents us with one far-reaching view from their south side, where the Hindoo-Koosh passes lead down to the broken outskirts of British India. "We saw before us an amphitheatre of snowy peaks glittering in the fading sunlight, and at their foot one vast snow-field, the depository of all their surplus snow and ice, and the first beginning of the great glacier which would bear the burden down the valley from it. This nook of mountains was the very Heart of Central Asia. One side of the amphitheatre was formed by the range of mountains which divides the waters of the Oxus, which flow to Turkestan, from the waters of Indus, which make their way to India. Here was also the meeting-point of the watershed which divides the rivers flowing eastward into Chinese Turkestan, from those flowing westward to Russian and Afghan Turkestan, with that other watershed which separates the rivers of India on the south from the rivers of Central Asia on the north. At the very point at which we stood those two great watersheds of Asia met; they formed the glittering amphitheatre of snowy peaks which we saw before us, and it was from the snow-fields at the base of these that issued the parent glacier of the mighty Oxus."

Here, leaving its Caucasus province to be dealt with later on, we pass from the Russian empire to that wider one, "upon which the sun never sets".[1]

[1] What has been said about Russian railway making, or other enterprises in Asia, may have to be qualified by what has happened, and what may happen, since these pages were written. Even amid its recent losses and distractions, the Czar's government has worked at doubling, extending, and improving those hastily laid Asian lines, their maintenance alone a heavy burden to the empire, the more so as their construction was often scamped by carelessness and dishonesty. But loans from Europe will no longer flow freely to the sands that even in our time have swallowed up cities and oases, and to snow-clad wastes where rails may be warped by the severe frost, as engineers have found by experience. The Trans-Siberian "white elephant" is believed to have already cost Russia nearly £100,000,000; yet she has an eye on a short cut to China from Lake Baikal through the Mongolian deserts.

THE BRITISH EMPIRE IN ASIA

HINDOSTAN

From the earliest dawn of history India has been a mistily famous land. In the Middle Ages exaggerated reports of its pomps and wonders excited the imagination and the enterprise of Europe. In our day, when its true condition is still too little known, there are few Englishmen who have not some vague idea of the picturesque features brocaded together in one of Macaulay's most familiar passages: "The burning sun, the strange vegetation of the palm and cocoa-tree, the rice-field, the tank; the huge trees, older than the Mogul empire, under which the village crowds assemble; the thatched roof of the peasant's hut, and the rich tracery of the mosque, where the imaum prayed with his face to Mecca; the drums, and banners, and gaudy idols; the devotees swinging in the air; the graceful maiden, with the pitcher on her head, descending the steps to the river-side; the black faces, the long beards, the yellow streaks of sect; the turbans and the flowing robes; the spears and the silver maces; the elephants with their canopies of state; the gorgeous palanquin of the prince and the close litter of the noble lady, from the halls where suitors laid gold and perfumes at the feet of sovereigns to the wild moor where the gypsy camp was pitched."[1]

This kite-shaped promontory of Central Asia is cut off from the rest of the world by natural barriers, its coast-line of between 3000 and 4000 miles being hardly a more confining limit than the huge mountain wall of the Himalayas, "Abode of Snow", the loftiest section of that stony "Girdle of the Earth" that may be traced across two continents from ocean to ocean. For 1500 miles, with an average breadth of some 200, this range bends round Northern India, broken by snowy passes and the rocky gorges of its chief rivers, which pour down from countless summits loftier than any mountain of Europe. There have been counted some half-hundred peaks over 24,000 feet, the highest of them, so far as is ascertained, being Mount Everest (29,000 feet), while it is possible that a higher point may yet be measured among the labyrinth of ridges behind, bordering the lofty Tibetan plateaux. In the Karakoram range, on the Turkestan edge, is one point (28,278 feet) only a few hundred feet short of Mount Everest; this long had no other name on maps than "K. 2", but now takes the name of its explorer, Colonel Godwin-Austen.

The snow-line, twice as high as on the Alps, varies here, according to the exposure, from 16,000 to 20,000 feet, unexpectedly proving to be lower on the

[1] We have used throughout the spelling of names long familiar to English eyes; but our section maps will usually show the official spelling introduced by Sir W. W. Hunter, which is not always used consistently, such names as *Lucknow* and *Cawnpore* having become household words in the old form.

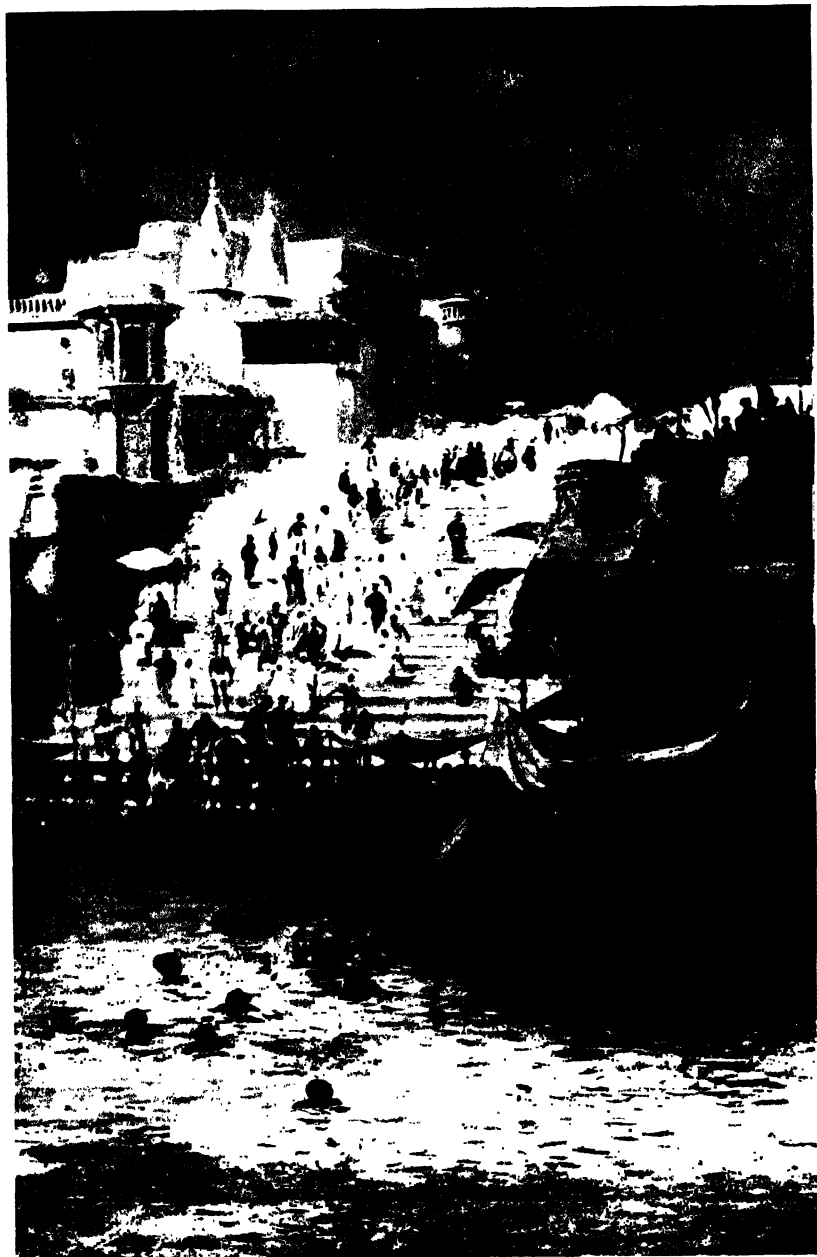
southern than on the drier and more sheltered northern side; but many of the tops shine out through the clouds clad in eternal white, dimly visible hundreds of miles away across the sultry plain below. Among them wind glaciers, forty or fifty miles long, fed by vast beds of *névé*, and often almost buried beneath the fragments of the splintered peaks above; huge avalanches thunder through the roars of the storm; *aiguilles*, *moraines*, *couloirs*, and all the familiar features of Alpine scenery are repeated on a vaster scale, in more appalling aspects of rugged barrenness seldom seen close at hand by eyes which can make the comparison. No foot is known to have touched the crown of the mountain monarchs that overlook Northern India. Some accounts of wandering adventure here, if not mere travellers' tales, want the credit of accurate observation and measurement. The highest point as yet authentically reached[1] seems to be where Sir Martin Conway's party climbed 23,000 feet on Pioneer Peak in the Karakorams, to see "ridge behind ridge, peak behind peak, higher and higher, tier above tier, with ribs of rock and crests of snow, and deep-lying valleys of ice-bound splendour, till the eye, bewildered by so much magnificence, ceased attempting to unravel the mountain maze, and was content to rest upon the whole as an impression, single and complete".

INDIA PROPER OR HINDOSTAN.

Among those snow-crested waves of frozen land, extending over a region larger than France and Germany, can be distinguished two main parallel ridges, behind which again is the Karakoram or Mustagh chain, these names properly belonging to passes in the unexplored mountains stretching along the Tibetan plateaux. The southern ranges trending northward at their west end, the whole three chains, with others traversing the northward region, bunch themselves together in the Hindoo Koosh, beside the great Pamirs which make the centre of

[1] This record has now been broken by the Duke of the Abruzzi and other explorers.

THE GANGES AT BENARES

"Of all the great rivers of India, none can compare in sanctity with the Ganges, or Mother Ganga, as she is affectionately called by devout Hindus. From her source in the Himalayas to her mouth in the Bay of Bengal, every foot of her course is holy ground. . . . After the lapse of twenty centuries, and the rise and fall of rival religions, veneration for the Ganges still figures as a chief article in the creed of modern Hinduism. The pre-eminently sacred spots on its banks are frequented by thousands of pilgrims from every province of the peninsula. . . . To bathe in the Ganges, especially at the great stated festivals, will wash away the stain of sin; and those who have thus purified themselves carry back bottles of the sacred water to their less fortunate relations." The most frequented bathing-place is the confluence of the Jumna and the Ganges at Allahabad, but Benares, lower down, has been for centuries the metropolis of Hinduism, and was the chief centre of Buddhism for eight hundred years. "The Ganges forms a bay or crescent-shaped reach in front of the city, thus permitting the eye to take in at a single sweep the long line of its picturesque ghats and splendid temples. . . . The people spend a large part of their time praying, bathing, or lounging by the water-side. The ghats are crowded with fakirs and other ash-besprinkled and almost naked ascetics, practising their devotions and lifelong austerities."—*The Imperial Gazetteer of India.*

THE GANGES AT BENARES, THE SACRED CITY

Asia. From the labyrinth of mountains that here spread over Afghanistan, the Suliman range runs south, shaping the course of the Indus; and the other side of North India is likewise curtained off by the hills of Assam and Burma, bending round from the little explored eastern end of the Himalayas. It is in its central stretch that the main range stands up as a wall above the plain of the Ganges. Below it, like a moat, lies a broad strip of malarious marsh and jungle called the Terai, bordered on the mountain side by forest slopes of the robust sal-tree, flourishing among a thick undergrowth of shrubs and creepers; beyond which again, at the very foot of the great mountains, deep trough-like *doons* may mark the beds of dried-up lakes, sometimes choked with rank jungle, but sometimes wholesomely verdured like a rich park. The Terai, an Irish bog overgrown by tropical rankness, is a most unhealthy region, seldom visited by Europeans unless in search of game; and it is said that not even wild animals can live through the hot weather in some of its suffocating recesses. The name of Terai-hat, given to the thickest of those helmets with which Anglo-Indians protect their heads against the sun, is a hint of the reputation borne by this district. On the west side, where the range is more scattered into high foot-hills and loops about the Indus tributaries, the swamps and thickets of the Terai become replaced by stretches of grass-grown sand.

Beyond this waste belt, southward, comes the great plain of dust and verdure, where one might travel for days without seeing a hillock, sometimes hardly a stone, an expanse as large as a European kingdom, upon which is crowded more than half the population of India. This plain, basin of the two chief river systems that have washed its soil down from the mountains, is Hindostan proper. The richer, larger, and the more populous part is on the eastern side, watered by the Ganges, with its tributaries, that, though not the largest, has become the most famed of Indian rivers, giving life in this world, if not in the next, as they believe, to over a hundred million souls.

The sacred Ganges, rising in a Himalayan glacier, has a course of about 1500 miles, for the greater part navigable, its countless feeders interwoven with a net-work of canals, whose maintenance and extension are among the most beneficial achievements of our rule. After taking in, at Allahabad, the Jumna on the right bank, then on the other side the Gumti and the Gogra in Oudh, joined again by the Son from the central highlands, it flows through the rich plains and rice-fields of Bengal, still swollen by tributaries larger than any English river, itself at least a mile in breadth for hundreds of miles, and flooding into broad reaches where the opposite shore is lost to the eye. As it approaches the sea it is joined by the Brahmaputra, a larger and longer river, which, rising behind the southern Himalaya chain, and — there under the name of Sangpo, which means the holy river — running eastward for hundreds of untraced miles in Tibet, has doubled back and broken through the mountain wall to take a south-westerly course, then draining the watery province of Assam. Neither of these great rivers can be said to swallow up the other, as they fall together into the Bay of Bengal by countless shifting channels, meandering through the Sunderbunds, a maze of marshy islands overgrown with dense jungle, inhabitable only by wild creatures, and opening over a delta some hundred miles broad. At the eastern end of this delta what may be called the main stream of the Brahmaputra unites with the Megna to form an estuary 60 miles broad at its mouth; at the western end comes the Hoogly, the chief

navigable channel on which Calcutta stands. The countless branches are interlaced over a space of 32,000 square miles of watery soil, all washed down by the rivers that still go on shoaling up this "amphibious wilderness" with their turbid burden of silt from the mountains, which they can no longer sweep onwards, yet by its offscourings the sea outside is discoloured for a score of leagues.

The Indus, which, as first known to Europeans, has christened India, is its longest river, with a stream of nearly 2000 miles. It also rises behind the southern chain, not far from the head-waters of the Brahmaputra, then, joined

Bathing Scene on the sacred River Ganges. (From a photograph)

by the Shayok from heights farther north, it flows north-westward, from oasis to oasis, through the stony steeps of Tibet and Baltistan, before turning south to break through the Himalayan gorges, where for a time it almost vanishes from our knowledge among the fastnesses of wild hill tribes. Swollen by the Kabul River and many another rushing stream, it descends upon the Punjab, along the base of the lofty Suliman Mountains. The Punjab, as is well known, gets its name from "The Five Rivers", spread over it like a fan, the chief of them the Sutlej, which, rising not far from the Indus, below those snowy Kailas peaks that are the Hindoo Olympus, seat of cloudy gods, comes to swallow up the other Punjab rivers, and double the volume of the main stream, before this receives from the opposite side the scanty mountain waters of Beloochistan. "Seven Rivers" was the ancient name of this region, a hint how at least one stream may have disappeared in its thirsty sands. For the basin of the Indus is far less fertile than that of the Ganges, its huge current running more to waste in a thankless soil, the broken elevation of which in some parts makes canalization less easy; but towards its mouth it can be distributed more widely through its

own alluvial deposits. Upon the shifting main stream large cities are rare; in dry weather its dwindling channels become choked by sand-banks that impede navigation, while in the wet season the suddenly-swollen tributaries may cause disastrous floods over miles of country. The "Doabs" between its Punjab branches remain often mere deserts, when our engineers have not been able to store and distribute a naturally irregular supply. By such needy borders a great part of the Indus water is sucked away before it pours into the Arabian Sea through a sand-choked and reed-grown delta where a canal and harbour works have opened the prosperous modern port and railway terminus of Kurrachee.

North and south of the Punjab two very different regions illustrate the variety of nature in India. To the north the spreading mountains enclose Cashmere, ruled by a maharajah of Sikh race under the helpful care of our Government. His dominion itself has a double character. Beyond the Himalayas it comprises, with other mountainous provinces, the stony Tibetan state Ladak, whose capital Leh is 11,500 feet above the sea, and some parts about the valley of the Indus are cultivated to thousands of feet higher. The southern portion is the famous Vale of Cashmere, once the bed of a great lake, fragments of which still dot the plain, and through it winds the River Jhelam, "famed Hydaspes" of the ancients. Shut in by snowy peaks, dark forests, and distant glacier beds, this oval valley, about 200 miles round and 5000 to 6000 feet high, has a sub-alpine climate that may well make it seem a paradise to its shivering or sweltering neighbours; and loudly have the beauties of its temperate summer been sung by Eastern poets as at second-hand by Thomas Moore. Travellers grow enthusiastic over its green fields and groves, its slopes of flowery grass, its very wastes covered with blue iris so that the ground seems to reflect the sky; the blossoms of hawthorn, horse-chestnuts, and wild strawberries enchanting eyes fresh from the dusty plains; the villages embowered among woods of fruit-trees, hung about with creeping vines, and alive with brightly-plumaged birds; the floating islands of vegetation on its waterways; the profusion of roses and other flowers by which even the roofs of the houses are turned into gardens. "Only man is vile" here; and he under an improved government should have a better chance of developing moral beauty. "The scenery was always lovely," says Mr. E. F. Knight, "especially in the evening, when indescribable effects of water, foliage, sunset clouds, and far, faint moonlight snows would be produced." Well might the Moguls lay out for themselves lordly pleasure gardens near the chief town, Srinagar, a place of 120,000 people, that has been called the Venice of the East, from the way in which the river and its canals are bordered by ancient palaces, temples, and carved dwellings. But in its narrow thoroughfares this comparison seems a less apt one to the eye than to the nose. A better name for one suburban quarter would be the Henley of India, the river bank being here lined with houseboats, bungalows, and tents "whose occupants are men in flannels and girls in Thames-side summer dresses". For Cashmere has become a holiday haunt of Anglo-Indians, hundreds of whom come every season to bask in its sunny vale, or to penetrate its hills in search of game that abounds in the wild black gorges more characteristic of Himalayan scenery than is this rare instance of a rich and open vale.

To the "Switzerland of India" a strong contrast is found on the south of the Punjab, where, between the course of the Indus through Scinde and the low rocky chain of the Aravalli Hills separating its basin from that of the Ganges,

extends the Thar or Great Indian Desert, that on a smaller scale has the redoubtable characteristics of the Sahara, without its rich oases. This is a sea of low sand ridges, broken by salt ponds and crusts, among which stunted trees or scrubby bushes, hardly affording pasture to camels, seem rarer than the bones of men and animals that have perished in trying to push from one well to another, perhaps against a burning wind driving before it clouds of scorching, stinging grit, sometimes so thick as to form a sickly fog, through which the pitiless sun glares like a ball of red-hot copper. Rain may not fall here for years together, then it comes in torrents, for a time drowning the hollows in quickly

Scene on the River, Srinagar

Photo Frith

parched verdure. To the south of this again lies a still more singular region, the Runn of Cutch, marked on maps as an inland sea, but in dry weather it is a flat plain, frosted over with efflorescences, or dappled with sheets of brine that yield its harvest of salt; then under the rains, or when south-west winds drive a flood of sea-water up its narrow opening, the whole expanse becomes covered by water so shallow that camels can plash their way between its marshy islands. This seems to mark an upheaval of the coast about the Indus delta, whose channels must have shifted to the west of their former course, where now on dry land are found the pierced stones that once made primitive anchors.

A slight subsidence of that great alluvial plain would turn the southern half of India into an island. Beyond the great river basins come higher plains and forests rising to the parallel ridges of the Vindhya and Satpura Mountains, which, though they have a height of several thousand feet, make no imposing show above the general elevation of the land. These heights, crossing the western half of the peninsula and throwing out a spur to the Ganges, form a barrier between

Hindostan proper and the tongue-like promontory of the Deccan, almost another country in its conformation, scenery, and inhabitants. The centre of the Deccan is a mass of bare, rolling plains and table-lands, 2000 to 3000 feet high, seamed by low volcanic ridges and deep water-courses, dotted with lakes, natural and artificial, shut in on either side by the ranges of the Ghauts, outside of which the coast is bordered by low plains. The terraced Ghauts, a name aptly derived from their resemblance to gigantic steps, rise on the western side to about 5000 feet, and like the Himalayas, on a smaller scale, present most wildly picturesque scenery as in sheer cliffs and thickly-wooded gorges they fall towards the Konkan, the level shore-strip of Bombay. On the eastern side they are so much lower and less grandly broken as hardly to deserve the name of a mountain ridge, forming rather the edge of the highland that here slopes more gradually towards the sea. To the south of Mysore these ridges knot themselves together in the airy Neilgherry (otherwise Nilgiri) Hills or Blue Mountains, whose highest point is 8760 feet. A great expanse of land is here covered by converging mountains; then comes a narrow but deep gap, beyond which the Cardamom range, with its highest elevation (nearly 9000 feet) in the Anamalai Hills, runs down the point of the peninsula, between the coast of Travancore and the broader plains of the Carnatic to Cape Comorin. The shore of the promontory on the east side is known as the Coromandel coast, on the west side as the Malabar coast.

The rivers of the Deccan, as might be expected from its conformation, are mostly too short, rapid, irregular in their flow, and interrupted in their course to be of much use for navigation, especially on the mountainous western coast; nor can they easily be bridled for irrigation. Three, however, have a length of 800 to 900 miles, and enjoy the reputation of sanctity which in this climate naturally attaches itself to a volume of life-giving water. This is specially the case with the Nerbudda, the Ganges of southern India, that between the Vindhya and Satpura ranges flows westward into the Gulf of Cambay, passing amidst magnificent scenery in its upper course, where, near Jubbulpore, it falls through a narrow gorge of marble rocks, crowned by one of the most beautiful and sacred of Hindoo temples that, to European hunters after the picturesque as well as to native devotees, has become a place of pilgrimage. The Tapti is a shorter stream draining the same side to the south of the Satpura Mountains. On the opposite coast the chief rivers are the Godaveri and the Kistna or Krishna, sweeping down the detritus of the Deccan highlands to form an advancing coast-line about their deltas. South of these the smaller Cauvery rushes from the highlands of Mysore by temples that attest its repute for sanctity equal, in local estimation, to that of the Ganges.

Besides Ceylon, to which a separate chapter is due, the Indian peninsula has several groups of island dependencies. Off the Malabar coast lie the Laccadive or "Hundred Thousand" Islands, so called as including the countless Maldive group, 200 miles to the south, both of coral formation, their countless reefs and palm-shaded lagoons peopled by a Malay race. The latter are politically connected with Ceylon. On the other side, far across the Bay of Bengal, and belonging rather to the Malay Peninsula, are the Nicobar Islands, continued to the north by the larger volcanic chain of the Andamans, muggy and malarious home of an expiring black race, so stunted in mind as in body as to be accused by their neighbours of being descended from monkeys. Port Blair, in the south

of this group, has been chosen to be the Botany Bay of India, and seems well fit for a penal settlement. Here, it will be remembered, Lord Mayo, the governor-general, was assassinated by a resentful convict from the north-western frontier, whose crime had been the prosecution of a blood-feud that, to the like of him, passed for the "wild justice of revenge".

This vast country, possessing "every variety of scenery, from peaks of ice to reefs of coral, from treeless burning plains to thick tangled jungle and almost impenetrable forests", has in its uneven surface, as in its very size, cause for

Interior of the Jain Temple on Mount Aboo in the Aravalli Hills (see page 164)

diversity of climate; but its general characteristic, even among the snow-topped crags of the Himalayas, is a fierce sun-heat at all seasons trying and, without caution, dangerous to Europeans. In Australia and in the Sahara, where as high temperature may be often braved, one does not suffer so much from the rays that here soon teach rashness or inexperience the need of thick head-gear affected both by white men and natives in the East. After one "touch of the sun" no stranger will venture to trifle with a glow that for the hottest hours of the day counsels shelter to those not inured to it from birth. In the so-called "cold weather", especially in northern India, as of course on the hills, ice will form at night; but the mid-day sun seldom invites to exercise, so that all residents get into the way of early rising to make the most of the morning freshness, and prolong their sunset airing into the quickly-gathering dusk. The dry heat of the uplands, though greater, is more bearable by most Europeans than the hot-house air of the coast, where in the south at least there is little change ot temperature all the year round beyond that brought by the alternation of land and

sea breezes. The "hot weather", that seems not to deserve the name of our friendly summer, kindles a furnace of heat, in which an Englishman is fain to shut out every ray of light from his abode, the fierce breath of noon admitted only through blinds of wetted grass and kept in motion by the swinging of punkas, when often no cooling devices or too-tempting drinks can avail to make life seem endurable by scorching day or stifling night.

More important here than the change between the hot and the cooler season is that of the rains, which makes the momentous feature in an Indian summer.

At the Village Fountain. (From a photograph)

We in England, so apt to grumble over our uncertain climate, would know how much we have to be thankful for after a little experience of Oriental monotony. "Another fine day!" sounds such a mockery to those who have learned to look on the sun as a foe rather than a friend, and to hail as angels' visits the dust-storms that may spring up in spring, followed by refreshing "mango showers". But these "little rains" are partial and uncertain; and the sweet season that inspires Western poets and lovers is here apt to be a time of intense trial to man and beast. All nature seems to wither in a dusty autumn, save where patches of paradise are watered by constant labour. Sometimes, too, one sees on the sandy Indian plains how large trees, sending their roots deep down into the water below, grow fresh with leaves and blossoms, while the dusty ground is strewn with dead leaves among its tufts of bleached grass. But in general the blasting sun plays the tyrant over animal and vegetable life, till the world grows a vast Black Hole, in which one can hardly breathe, and the "scorched darkness" brings no rest, and the very soil of baked mud cracks as if gasping for air.

With what mind then must our home-sick country folk read their poets' praises of May and June?

At last, when endurance is almost spent, comes the blessed relief of the monsoon, bursting on the coast from the south, sweeping towards the mountains its burden of rain stored up from the barren ocean. The monsoon's arrival, early in June, presents from the Ghauts above Bombay a grand spectacle thus described by M. Reclus: "On one side of the horizon the copper-coloured vapours mass themselves into towers, are grouped like 'elephants' to use the local phrase, then slowly advance landwards; the cloud deepens, it covers half the sky, while the blue of the other half is unflecked. On one side darkness soon wraps mountain and valley, but far off the outline of the shore stands out with marvellous sharpness, the sea and the rivers glitter like slabs of steel; the fields, the scattered towns, seem to shine with supernatural glare. The thunder begins to growl, the clouds dash against the scarps of the Ghauts, and the tempest breaks forth: flashes following each other continuously; the air filled with ceaseless peals; the rain coming down in torrents. Then there is a rent in the thick gloom, clear shining comes gradually back, and of all these crumbling skyey masses there remain only light mists creeping up the valleys or curling about the tree-tops. Such is usually the first burst of the monsoon, ushering in the regular rains; but the rain-clouds sometimes arrive unattended by thunder; darkness suddenly fills the air and the downfall begins. Sometimes for a day or two the clouds skirt along the promontories, like ships of war passing round a fortress; as it doubles the point, each cloud discharges its volley, as if the sky were at war with the mountains."

For the next quarter of the year "the rains" are the prevailing character of the season, the breaks in them making a time of muggy, steamy damp as trying to health as the heat. The quantity of the rainfall varies in different parts. On the Ghauts, that take heaviest toll from the ocean currents, it is said to amount sometimes to nearly 300 inches in the year, as at Mahabaleshwar, the hill station of Bombay, where the very tombstones in the churchyard are thatched in to prevent them being washed away. But above the Gulf of Assam the fall is twice as great; this, indeed, is believed to be the wettest corner of the globe, in one very rainy year about 800 inches having been counted as against our annual dribble of some score inches in Norfolk, doubled or quadrupled on the west side of England. Among unknown Himalayan wildernesses the rain-storms can be gauged only by the erosive force with which watery avalanches have carved the peaks and crests into extraordinary similitudes of the ruins of human handiwork, above dark gorges hollowed out by torrents so abruptly that their slopes scarce afford a yard of level ground. On the Indian plains 40 or 50 inches may be taken as an average supply. In Scinde it is estimated as under 10 inches.

When the rain does come it amply makes up for that long spell of drought. The rivers, on whose banks one may see the fragments of wrecked craft caught among boulders high above their trickling current, once more rise in rushing flood, here and there spreading out into lakes. Many parts of the lowlands are swamped; the peasant must paddle to his field; villages stand up like islands and tree-tops like beacons in a far-spreading inundation that will drive their inhabitants for refuge to farther heights. But when the deluge subsides the land is quickly drowned afresh in green, and now appears cause for the sacredness of water in this thirsty land, where almost every confluence of the Ganges is a place

of pilgrimage, and on its banks are clustered whole cities of holy shrines. Man has done his part to share out the benefits of nature. Canals, aqueducts, ditches, and smaller conduits carry off the overflow of the brimming rivers. Huge tanks store up the supply, or deep wells, from which skins and buckets are hoisted by a bamboo crane or by creaking windlasses turned by patient bullocks. Beside wells and fountains, or by the banks of pond or stream, every morning the Hindoo will be found religiously washing himself in public, as a practical act of worship and thanksgiving to the powers that send this blessed element from heaven.

Sometimes the floods are calamitous. Sir W. W. Hunter describes one in Orissa that covered nearly 300 square miles for weeks with several feet of water,

Periyar Dam, South India, in course of Construction

Photo. Nicholas & Co.

when "the rivers came down like furious bulls, bursting their banks in every direction. More than 412,000 people were suddenly driven out of house and home, and found themselves in the middle of a boiling ocean. Thousands of miserable families floated about in canoes, on bamboo rafts, on trunks of trees, or on rice sacks which threatened every moment to dissolve into fragments beneath them. Every banyan-tree had its rookery of human beings, while the Brahmans from the roofs of their brick temples looked down in safety as the flood roared past. The common danger disarmed all creatures of their natural antipathies. Snakes glided up to the roofs and burrowed harmlessly in the thatch. Sheep and goats were carried away by herds in the torrent, and in a few days their carcasses came to the surface and floated about covered with crows and kites. But the most pitiable sight of all was the plough-cattle, standing in shallow parts up to their necks, and hungrily snuffing the barren waters for food, until they

sank exhausted into the slime." In this region, where all seems to be on a gigantic scale, terrible cyclones also work far-spread havoc, and can destroy tens of thousands of lives in a day.

But the most familiar and the most fearful calamity is when over large districts the rain-clouds may float by as in pitiless mockery, or give a grudging discharge short of the needed relief. That means warning of far-spread death. Water inevitably runs short; the land is scorched up, the crops fail, and myriads or millions of impoverished peasants will be blighted into gaunt shapes of hunger and disease. The great famine of 1877-78 is calculated to have cost over five million lives. Under the old native governments these victims were left to die like flies, struggling feebly among each other for the scanty means of subsistence. And now, when the resources of an enlightened Government are brought into play for humane relief, not all the doles of charity from the other side of the world, nor all the strenuous labours of our overtasked officials, can do more than mitigate the unspeakable sufferings of ever-recurring famines, followed by the pestilential diseases that are epidemic in India.

INHABITANTS OF INDIA

This rich land has all along invited conquest, even before the days of classical warriors who, in the twilight of history, are seen flitting across its mountain barrier. In the central hills still exist aboriginal black tribes whose very names, meaning *slaves* or *labourers*, denote how they have been driven here by encroaching superiors; some of these are so low in the scale of life that till last century they offered human sacrifices, fought with flint arrows, and clothed themselves with leaves, like Adam. In the north, under the Himalayas, there is a strong strain of Mongoloid blood. At the southern end the people mainly belong to a stock called Dravidian, which, with its variety of allied languages, Telugu and Tamil the most widely spoken, seems to represent a wave of invasion earlier than that which came to overflow the main part of the peninsula. At least three thousand years ago we find dominant on the Indus and the Ganges a fair-skinned Aryan people, akin to ourselves, now represented by the pure-blooded Brahmans and Rajputs, while their blending with lower stocks has produced the masses of the brown Hindoo population in various shades, sometimes differing as widely as nations of Europe from each other. In the north-west are the manly Sikhs and the hardy Jats, of whom a wandering shoot is recognized by some ethnologists in our familiar gypsies, popularly identified with Egypt. On the other side of India swarm the millions of Bengal, who, as Macaulay puts it, "enervated by a soft climate and accustomed to peaceful employments, bore the same relation to other Asiatics which the Asiatics generally bear to the bold and energetic children of Europe". This weak-kneed character has come to mark the typical Hindoo; and that his degeneration is of old date appears from the persistency with which Tartars, Arabs, Turcomans, Afghans, and other warlike races were able to swoop down upon the fruits of his patient industry.

For centuries India was overrun by streams of Moslem invasion, depositing a new stratum of flesh and blood in many parts. The Moslem warriors in turn grew languid under Indian suns; and the Mogul empire was hardly established

in all its stateliness when it began to go to pieces, frittered away among self-seeking viceroys and assailed by a revival of Hindoo vigour in the Mahratta hill-tribes, who carried their devastating excursions to the walls of Delhi and Calcutta. By this time India was being intruded on by sea as well as through the Himalayan passes; and more than one European nation sought to win a share of its wealth, at first in the way of trade rather than of war. Amid the ruins of the Mogul empire grew up, for a time unnoticed, the power of a great trading company which, by the rivalry of France and the feeble tyranny of native princes, was half-forced, half-tempted into a career of conquest. A century completed that conquest, for a moment endangered by the crisis of the Mutiny, then the joint-stock master, "John Company", whose very name and nature made such an imposing mystery to its millions of subjects, handed over India to be the brightest jewel in the British Crown. This latest conquest differs from former ones in that the dominant race show little desire to settle for life in the uncongenial country they govern, while to its mingled population they have added a new strain in the multiplying half-caste element which assumes the title of Eurasian, and usually aspires to follow European customs, as is natural where European birth makes a title to aristocracy. It must be confessed that this stock, having its root in our vices, does not bear a rich crop of our characteristic virtues; but to the rule there are exceptions.

Parsees worshipping the Rising Sun on the Beach at Bombay

Among the elements that go to make up India's three hundred millions, special mention should be made of the Parsees, who, though a small, are an important, constituent. Descendants of Persian fire-worshippers, exiled from their native land and admitted in India to the hospitality of fresh persecution and

abasement through which they held together for centuries, thriving by their turn for commerce, under British protection they have developed into a singularly-enterprising and industrious community with its centre at Bombay, where their high, black hats and snow-white garments are so often seen, notably on the shore when at early morning they pay their hereditary devotions to the rising sun. Here one can hardly believe that the Parsees are only about a hundred thousand strong; but all over India, especially on the western side, will they be found prospering, and in the ports of Eastern seas, seldom in servile positions, rather as bankers, shop-keepers, and men of business. Some of the Parsees of Bombay are true merchant princes, distinguished by their taste for art and for public-spirited liberality in the use of their wealth; upon more than one our Government has bestowed the title of baronet; and none better deserved distinction than the late Mr. J. N. Tata, whose family have carried out his munificent offer of 30 lacs of rupees for an educational endowment. The rising generation, sometimes educated in England, take kindly to our athletic sports, and cricket has become their favourite game. The better position of women among them makes social intercourse with Europeans possible, as it is not in the case of Moslem and Hindoo *purdah* ladies. The higher class of Parsees begin to hold somewhat lightly to the religion of Zoroaster, which readily adapts itself to liberal conceptions, while its strict observances centre round a veneration for fire so regardful that the orthodox Parsee scruples to smoke as a trifling with his sacred element. This reverence having forbidden them to use cremation, like the Hindoos, their most striking custom is that of laying the dead on the top of high towers at sunrise and sunset, to be devoured by the vultures that, perched in a hideous row, await their daily meal about those "Towers of Silence", standing in leafy gardens outside cities of western India. Enlightened Parsees now incline to give up this insanitary practice.

The Parsees are, in India, much what the Jews are or were in other countries. Here, too, Jews have made their way in small numbers. A small sect of Syrian Christians also has long been settled on the south coast. The ubiquitous Chinaman takes service in the seaports where Armenian and other immigrants arrive. But it would take too long to enumerate all the races and communities that here dwell together under the ægis of the *Pax Britannica*, with this one title to be called a nation, its elements imperfectly fused or even in a state of mutual repulsion, kept apart by antipathies of race and superstition, speaking over 200 different tongues, with the mongrel Hindustani as a main language of intercommunication, and Hindooism as the prevalent religion.[1]

[1] "Religion may be taken as the key-note of Indian life and history. While our ancestors were still dark-minded barbarians their Aryan kinsmen migrating to Hindostan had developed a singular degree of culture, especially in religious thought. Before Greece or Rome became illustrious the Vedic hymns bespeak lofty ideas of the unseen, and the Brahminical priesthood appear as philosophers, legislators, and poets of no mean rank. The first historical notices of India show a high level not only of material but of moral civilization, as well as a manly temper of warriors well able to defend the soil they had won. This enervating climate, however, with its easy efforts for existence, has proved an influence of degeneracy, and most clearly so in the matter of belief. Good seed which here sprang up so quickly was always apt to wither under a too scorching sun, or to run to rank foliage rather than to fruit. Early Brahminism, itself a marked growth in thought, after a time began to be choked by the heathenism it had overshadowed. It sent out a new shoot in Buddhism, a faith of noble ideals which to this day surpasses all others in the number of its adherents. This, in turn, became a jungle of sapless formulas, and after 1000 years died out on the land of its birth. Then grew up modern Hindooism, a union of Brahminical dreams of divinity and Buddhist love for humanity, interwoven with the aboriginal superstitions, the whole forming a tangled maze where the great Hindoo trinity, of Brahma the Creator, Vishnu the Preserver, and Siva the Destroyer, take Protean shapes as a pantheon of innumerable gods, amid which higher minds may turn upwards, seeking one Almighty Spirit, but the vulgar crowd fix their attention rather on grotesque idols, base fetishes, symbols of fear and sensuality, fitly adored with degrading rites and barbarous observances."—Hope's *Story of the Indian Mutiny*. F. Warne & Co.

In this deeply-rooted wilderness of misbelief one of the greatest obstacles to progress, and the most striking feature of social organization, is the system of caste, doubly fostered by superstition and pride, thriving on that slavish regard for custom which is the bane of the East. The Aryan conquerors became originally divided into three superior classes: *Brahmans*, priests; *Rajputs*, soldiers; and *Vaisyas*, tillers of the ground; and they included the despised aborigines under the general name of *Sudras*, or serfs. Then the sudras began to split up into particular classes, the superior ranks also being subdivided, while

Photo. Bourne & Shepherd

Prayers by the Wayside

The worshippers are prostrating themselves before emblems of the cobra and other deadly snakes.

still careful to distinguish themselves as the "twice-born" castes, who wear the sacred thread, badge of their spiritual aristocracy. Thus the castes have grown to be innumerable, counted by hundreds, if not by thousands, each making it a sacred duty to hold itself cut off from others by distinctions of rank and occupation. Members of different castes cannot marry, will not eat together, must not touch food cooked by an inferior; indeed a high-caste Hindoo will throw away his dinner and go hungry if so much as the shadow of an outsider has fallen upon it, and smash the vessel from which a proud European has drunk. Each orthodox Hindoo finds it necessary to use his own pot or cup, and to prepare his own meal where not in company with his fellows. Caste is shown by dress, by the tools of a man's trade, and by many minute signs that escape a European but are easily interpreted by the native who knows his world. It does not necessarily coincide with social position; a powerful prince may by birth be of lower caste than many of those who humbly serve him, but, *quoad sacra*, have the right to despise him. In our native army a high-caste Brahman will take orders from an officer who must

do *poojah* before him when his sacred character comes into question. Whatever caste a man belongs to by birth, it is rare for him to rise out of this.

If by any neglect of its unwritten ordinances one has violated his caste, he may have to make atonement by going through some humiliating and disgusting ordeal, one feature in which is hardly mentionable to ears polite, else he becomes an outcast pariah, shunned by those to whom alone he can look for the kindly offices of life, doomed to the ruin in this world which seems his fate in the next. The force of caste-obligations varies in different parts; on the Mahrattas, for instance, they sit more lightly than on the Bengalese; but the sentiment underlying them leavens even Mohammedans brought into contact with Hindoos. Englishmen who, in their haughty attitude towards racial inferiors here, unconsciously illustrate the origin of caste, profess to respect it as far as possible; but under their management of India its scruples are often bound to go to the wall. A Brahman who enlists in the army can hardly escape the degrading touch of leather; one who gets sent to prison may find some difficulty in having the services of a higher-caste cook; travelling by railway brings temptation to impiety, when through a long journey a scrupulous believer must go without a cooked meal, and if he have not his own drinking-vessel must make shift to have the water poured into his closed hands by the water-carrier, whose touch is defilement. Sepoys taken to the cold heights of Afghanistan have had to be forbidden their ceremonial ablutions, which in that climate often proved deadly. The mere fact of travelling to England, as better-class natives do in increasing numbers for education and other purposes, compromises caste sanctity; but so many are in this case as now to form a class considerable enough to defy public opinion. Association with Europeans in domestic service should wear down the restrictions of caste, though these may be so far encouraged by prudent housekeepers as a substitute for locking cellar or cupboard. Enlightened and wealthy natives, in private if not in public, begin to neglect such inconvenient prejudices; but it is unfortunately too often observed how they copy our worse more readily than our better manners. An Indian saying is that the first sign of a native's Christianization will be to get drunk, the second to marry a widow, and the third depth of iniquity when he so far forgets himself as to eat beef. Reformed Hindoo systems, such as that of the Sikhs, reject caste, whose barriers seem to have been thrown down for a time by Buddhism; but among the general body of the people it is a tyranny, tempered only by such inconsistencies as are found between the theory and the practice of other creeds, and now by various influences of relaxation which seem likely to be progressive.

The slavish condition of women is another barrier to progress, heightened by the Mohammedanism that in many parts of India has worked upon the older faith, the two religions indeed having a corrupting influence on each other. A point of respectability, like keeping a carriage, is that mother or daughter be a *purdah* woman, curtained from sight of the other sex, pent up in zenanas for a life of petty gossip and childish amusement. Nothing in our habits more amazes a native than the fact of English ladies openly dancing, riding, playing at ball with men, as only his shameless nautch-girls would do. To us again nothing seems more ridiculous than the mystery that surrounds an Indian lady, who cannot travel by train without being ladled from a shut-up box into the barred caravan, like a wild-beast den, reserved for the like of her; and if such a one be not available will insist on stifling any European women who may be her fellow-

travellers, by keeping doors and windows closed; as English gentlemen may have to put up with the companionship of a rajah attended by a naked fakir as his chaplain, or of a Moslem who at the hour of prayer spreads out his carpet across the narrow floor. It is seldom, indeed, that women of the two races need thus come into contact, social intercourse being hardly possible between them.

The Eastern woman, where not a drudge, is looked on as mainly a breeder of children. In India marriage is almost a religious duty for the man, whose soul would be at sore loss if he did not rear a son to perform his funeral rites.

Photo Bourne & Shepherd

Hindoo Bride and Bridegroom

Matrimony being a matter of business between the two families, a match will often be arranged for mere children, who may never see one another till the union comes to be consummated. If the boy-husband die in the interval, the unfortunate girl is doomed to the miserable lot of a widow, who can never mate without impiety, and who, though a prince's daughter, shorn and stripped of her ornaments, must resign herself to becoming an abject outcast among her father's lowest servants. Time was when such an unfortunate, dazed by grief, drugged into ecstasy, or forced on to the pyre by stern priests, was held bound to burn herself alive beside the husband's body as one for whom life was no longer worth living in this world. This custom of *suttee* is one with regard to which our Government has broken its rule of tolerance, as in the case of hook-swinging and other cruel practices that once figured in missionary magazines, but it was not abolished without much difficulty. Woman, so capable of self-sacrifice, is here reared to look on her debasement as natural, even to hug the chains of custom. Another atrocious practice which we had hard work to put down was that of

Photo. T. B. Blow

Indian Fakir, Allahabad

This man has held his arm up for over twenty years and cannot now take it down.

killing off female babies as a nuisance. A girl learns from the first that she is not welcome in the family, while her brother's chance is to be spoiled by the folly and indulgence of his proud mother, the degradation of one sex thus reacting most mischievously on the character of the other in its most plastic period of formation. Every "mem sahib" in India knows what a fond ayah will do to rear her charge as a little tyrant, where male nurses also may show an extraordinary degree of gentle indulgence and respectful affection to the children of their masters. Kindliness, patience, and suave courtesy, indeed, seem the virtues of the Hindoo; and while we enumerate his faults let us note how to the sick, poor, and helpless, as well as to lazy devotees, he is charitable according to his means. "That which is done by Poor Law over the British Isles", Sir Richard Temple reminds us, "is managed by voluntary effort all over India."

Another salient feature in Hindoo religion is its exaggerated regard for animal life, by writers of Voltaire's school extolled as a noble humanity that should put Christians to shame, while it appears rather a superstition founded on the idea of the transmigration of souls into animal forms. At the best this is an unpractical form of virtue such as often marks the running to seed of devout sentiment, well illustrated by the legend of that Oriental saint who fed a starving tiger with his own flesh. The pious Brahman, if his venerated cow broke its leg, would think it a sin to put the poor beast out of pain, but a duty to bring it food for prolonging its misery. Killing is repugnant to the Hindoo mind. The scrupulous sect of Jains, who can have never examined a drop of water through a microscope, go about with a cloth over their mouths, lest by accident they should sacrilegiously swallow a fly, and scruple to light a lamp for fear of attracting a mosquito to its doom. By this sect chiefly are maintained hospitals for maimed and diseased animals, where curing makes small part of the treatment; and such queer charity is said to be pushed to the point of feeding vermin on the body of a man, drugged to unconsciousness lest he should be irritated into impious slaughter of the tiny tormentors.

It is well known how the cow here is a peculiar object of worship, kept in filthy idleness, fed with observant care, protected against all ill-usage, while the ox and the poor bullock may be cruelly goaded and tail-twisted to toilsome tasks. Nothing more horrifies a Hindoo than our iniquitous habit of eating beef. No cause of quarrel between Hindoo and Moslem is more frequent than the latter's

impious want of regard for the sacred animal. In Cashmere, a mainly Mohammedan state, ruled by Hindoos, to kill a cow is punishable by life-long imprisonment. Under our direct government the Hindoo who accidentally commits such a crime can purify himself only by a penitential pilgrimage to the Ganges, not without fees to priestly absolvers. None of this race may be a butcher; even leather-dressers are a degraded caste, yet among them those who deal with the skins of cows will look down on the inferiors whose material is mere horse-skin. So strong is the prejudice that Englishmen sometimes judge well to defer to it. One could name a high official, by no means remarkable for the profession of ascetic virtues, who thought it his duty, while in a certain important post, to become a total abstainer from what here represents the roast beef of old England.

Monkeys are only less reverenced, with an affection due to the fame of Hanuman, one of the most popular incarnations of the Hindoo pantheon. Temples have been established and endowed for these tricksy deities, who in troops are allowed to infest even the streets of a town, playing the thief more often than the beggar; but the robbed shopkeeper durst not drive them off by violence. A worldly proprietor may go the length of *shooing* the devastators away into his neighbour's garden; but the truly pious man, when the monkeys come to steal his mangoes, dutifully offers them *chupatties* or other tribute from his larder. The peacock is also an object of special veneration. Keen are the grudges raised by our sportsmen's want of respect for these taboos, through which even the mild Hindoo may be driven to indignant violence. For example of a case constantly recurring, some years ago a soldier accidentally shot a calf, near Ahmedabad. Soon afterwards a young officer, coming to shoot at the same place, was mobbed, seized, and stripped by the outraged villagers, who bound him naked to a tree and left him in the sun to a torturing death, from which he was saved by the timely arrival of a party of his comrades. It is noticeable in such scrupulous tenderness of life that it does not always regard the human animal: the jailers of the Black Hole, the slaughterers of Cawnpore, would no doubt have shuddered to stain their hands with the blood of a dove. All animals, indeed, do not come off equally well with this bastard humanity, that, while straining at a gnat, swallows many a moral camel. The goat is literally made a scape-goat in religious sacrifices, and the kid is a feast for those who

Dancing Girls and Musician

durst not kill a calf in a land where no small part of the people go half-starved all their lives.

Further notable features of Hindoo faith, the austerity and beggary of its filthy *fakirs*, the exactions of its idle priests, the cumbrous observances of its ritual, its hideous images of innumerable gods, its stone bulls and other brutal idols, its mean village fetishes of tree or rock, its abject dread of evil spirits, that goes on finding ever new shapes for propitiation, all these, familiar to us from the reports of scandalized missionaries, are only the natural growth of superstition beneath that sweltering sky, where mental slavery makes faith a day-dream or a nightmare, and ignorant fanatics selfishly seek to work out their salvation without cultivating fruit for the use of fellow-men. Like other creeds, this has its diverse moods and manners of worship, there being many sects specially dedicated to the cult of Vishnu and Siva in their various incarnations, while the first person of their trinity seems to be held as "too bright and good" for ordinary devotion. Krishna, the Indian Apollo, a radiant youthful avatar of Vishnu, is dear to women; Kali, the bloodthirsty wife of Siva, has many votaries; and the heroic Ram appears most generally popular, from the fact of his name making a universal salutation.

One remarkable body is the Jains, strong on the west side—originally a reforming sect that appears at least as old as Buddhism who, now largely belonging to the merchant class, have liberally spent their substance on elaborate temples such as those on Mount Aboo, at the south end of the Aravalli Hills, standing up so far seen from the plains, within sight of a railway which brings to it many pilgrims of the picturesque as well as true devotees. The astonishing rock sculptures found in various parts of India are usually Buddhist, a fact that proves their antiquity. The finest Hindoo temples are, as a rule, to be looked for in the south, beyond the tide-mark of Mohammedan invasion; but the zeal shown in this kind of piety is attested by the huge crop of holy places that have sprung up in modern times, at Benares, for instance, where two centuries ago Aurungzebe played the iconoclast among native shrines.

The Hindoo, who holds beef-eating in horror, is not altogether a vegetarian, any more than is the Moslem hater of pork; but by poverty, rather than on principle, the inhabitants of the peninsula are mainly temperate in diet; and fortunately its climate is congenial to temperance as to indigence. Whatever show of gold and gems it may here and there scrape together to dazzle the eye, India is a poor country. Taking millionaire rajahs together with famine-stricken coolies, it has been calculated that each inhabitant has at the most an average of three halfpence a day to live upon. The necessities of life are cheap enough, indeed, in a good season. A soldier's or a servant's pay comes to a few rupees a month, out of which he sometimes will keep a large family. The staple of food is grain, rice, millet, barley, wheat, and others, helped out with milk and ghee, the boiled butter that is such universal "kitchen" of a native's simple fare. The *chupattie* or girdle-cake is his common baking. Sweetmeats, made with sugar and ghee, are favourite dainties that come in very useful on such occasions as long railway journeys, when the native cannot cook for himself according to the rules of his caste. The *banya*, or merchant, and all wealthy enough to make free use of such luxuries, will run to fat and paunch; the hard-working peasant, who must dip charily into the ghee-pot, is more like to be thin even to gauntness, yet with a tendency to pot-belly, swollen by masses of

vegetable food. This kind of diet seems to produce a softness of body and a mildness of temper that has made them like sheep before more wolfish assailants. Yet, wanting in stamina and in spirit as he is, the spindle-shanked native often shows an activity and power of endurance that might put to shame the beef-fed Briton, whose pride better bears comparison with the unwieldy laziness of self-indulgent townsmen. The use of opium and *bhang*—an intoxicating drug made from Indian hemp—answers here to our alcoholic dissipations as a rule; yet sons of Hindoo Belial, too, can make beasts of themselves on the native rum, called *arrack*. Betel is largely chewed, causing a red discoloration of the teeth; and tobacco, home-grown and inferior in quality, is much enjoyed by both sexes in the oriental hubble-bubble, or rolled up in leaves into funnel-shaped cigarettes.

The climate, in most cases, relieves the working man from the need of all but one indispensable garment; yet the modest Hindoo has two waist-cloths, which he so handles as never to expose himself even in his public ablutions. Some sort of turban, the thicker the better for his shaven head, is more necessary than shoes, which must never be kept on before a superior. For other dress, a sort of tight trousers or loose hose are much worn under various kinds of coats. Mohammedan women, more often than Hindoos, may be seen in such trousers; but the common feature of female dress is the *sari*, a long strip of cloth, that, like the Highlander's plaid, can be wound about the body in various ways or drawn half over the head as a hood. The upper classes have their more elaborate costumes, which begin to be supplanted by or ludicrously mixed with European apparel, as the *cummerbund*, so common in the East long before the Jäger system had been advertised, begins to make its appearance even in Piccadilly of a hot summer.

The greater part of the people are cultivators of the land, from which on rich soil they may win two, or even three, annual crops by patience, industry, and constant care. The Hindoo *ryot* tills his fields in the way handed down from father to son. Large farms and expensive machinery are beyond his ideas; his main artificial need is the water-supply, for which he must often depend on elaborate irrigation-works. He scratches his fruitful plot with a wooden plough, drops in the seed, and nature does the rest. When his spring or autumn crop is ripe, he squats on the ground to reap the grain in handfuls with a crooked sickle, taking a quarter of an acre for a good day's work. Burdened as he is by taxes and assessments due to the Government as lord of the soil, the economical peasant strives to hoard up silver coin, which may make the trousseau of his daughter when she is to be got rid of in marriage. After the ornaments in which his womankind often carry about no small part of the family wealth, his chief ostentation is the giving of a costly feast on occasion of a birth, wedding, or funeral; when, to make a display among his neighbours, he too often indebts himself to the class of money-lenders who grow fat upon his narrow margin between income and expenditure. Another thriving profession here is that of marriage-makers, who get a fee for acting as go-between to bring suitable couples together, without any reference to natural inclination. This is not the only curious trade in India. There are beggars so well off as to be able to ride on horseback. Jugglers, acrobats, nautch-girls are all recognized classes. There are even bands of professional thieves, who, when out of work, make excellent watchmen, on the proverbial principle of setting a thief to catch a

thief. The Thugs were murderers by trade till our Government put down that branch of industry, the crimes of violence, once so common, being now almost stamped out unless in wild hill districts, or occasionally in towns, when religious excitement boils over into riot.

Most occupations, transmitted from father to son, are a matter of caste. There are the *bheesties*, or water-carriers, whose skin bags only a man of low caste may handle. There are the *dhobies*, or washermen, the exercise of whose craft is as much thumping as scrubbing, and who at a riverside may be seen

Dhobies at Work, Calcutta

Photo Bourne & Shepherd

making havoc with linen. There are the *dirzees*, or needlemen, that sit cross-legged in an employer's verandah till they have finished their job, and will exactly copy a suit of European clothes even to the rents and patches. There are the weavers who produce native fabrics not yet driven out of the market by our machine-made goods. There are the potters and the metal-workers who will not fail for work where every man must carry about with him his own cooking-pot and drinking *lota*. Each department of domestic service has its caste of hereditary menials: the horse must have his grass-cutter as well as his groom, and the sahib's boots cannot be handled by the man who makes his bed, so that quite a modest English household needs a dozen do-little servants. Lazy fellows, with no regular calling, find congenial situations as the swaggering, swashbuckling followers of some ostentatious nobleman. The besetting ambition of a native who has learned English is any post under Government—clerk, messenger, or policeman—that gives a chance to play the great

man in a small way and pocket bribes for the favour they are supposed to influence.

Truth, uprightness, and straightforward independence will not be the strong points of a nation too much broken in to the rule of tyrannous masters. Bribes, *backshish*, *dustoor*, money given and taken underhand or in the way of bounty, instead of by open contract for honest service, are the curse of the East. A servant who would scorn to rob his master expects by *dustoor*, custom, a commission on transactions that go through his hands. A driver or porter, who has been trebly over-paid, will give up the rest of his day to sitting at the employer's door, on the chance of dunning out of him a few more annas. The humblest agent takes as undoubted his right to sweat the earnings of those working under him. That the official's palm should be greased by the suitor, that the tax-gatherer should be an extortioner, seem but matter of course. In token of obeisance the inferior must offer some present, however small, which the lordly superior may merely touch and remit. The native, starved in manly self-respect, hungers to be put in some kind of authority, out of which his vanity as well as his covetousness may be fed. Men who will cringe like dogs, lying and flattering when they must, show great aptitude for playing the bully when they may. Striking will be the contrast between the obeisant servility of a baboo railway clerk to the sahib, and the haughty airs he puts on to the sahib's low-caste servant. But for our rule, India, degenerate under so many yokes, would be a scene of general oppression and corruption; and our hard task is to impose peace and fair dealing upon its rival peoples, its manifold classes, its hostile creeds, and its would-be tyrants.

On the top of this seething three hundred millions, the conquering race float like drops of oil upon water, hardly a quarter of a million strong, not one white face to a thousand brown and black ones. The great majority are officials and soldiers; few Englishmen seek to make their homes for life here; and it is well known how only on the hills can white children be healthily reared. We are but encamped among the natives, in whom our interest seldom develops into sympathy. Sympathy is difficult indeed between two races whose strong and weak points so ill correspond, the character of the one marked by rough frankness and vigour, of the other by smooth-tongued flattery and helpless servility. That the natives respect us is not more certain than that, as a rule, they do not love us. Under the circumstances, social amalgamation is out of the question, and unfortunately it is not the best part of our morals and manners that prove most easily copied in the East.

The British official is the true noble, whom high-born rajahs are willing to ape in various ways. Then comes the class of private Englishmen, who cannot here be called civilians: traders, planters, and so forth, chiefly congregated in the great cities or in certain districts exploited by their enterprise. The status of European foreigners may prove a little awkward, unless in large ports, where their consuls look after their interests. All other social pretensions give place to rank in the service; it is serious work making out orders of precedence at mess and club dinners, where ladies are often admitted, who show themselves most keenly alive to such questions. The natives well appreciate distinctions between *Burra Sahib* and *Chota Sahib*; but to them every white face is more or less reverenced, and a European almost everywhere finds himself saluted and salaamed to with the courteous deference that comes natural to these people.

Sahibs of the old school would boast how they expected a native nobleman to dismount and humbly stand by the roadside to let the lord of creation pass by in due respect.

If the whole truth must be told, it were to be wished all English folk in India better represented our national virtues. Many of those who seek their fortunes here fail to stand the trial of finding themselves members of an aristocracy that takes rank above conquered wealth and titles. The brutal side of our nature seems too much drawn out by a deference to which men have not been accustomed at home; and our arrogance is apt to show itself rather in an inconsiderate bluntness than in selfish dignity. The lower one goes in rank and social obligations, the more one sees this. The British subaltern's contempt for "niggers" is no elevating influence, nor, with all his good points, does T. Atkins, as represented by his friend Mr. Rudyard Kipling, seem a worthy missionary of civilization. The same author illustrates the deteriorating effect of this exile on women, who, parted from their children and without bracing duties or occupation, are the more disposed to fall victims to that power always ready to find work for idle hands and vacant thoughts. The snobbish sin of social jealousy, indeed, is here held in salutary bonds. Everyone has his fixed place in the hierarchy of official or military rank; and as most families' income is known to a rupee, there will be little temptation to pretentious extravagance. On moral and mental, if not on physical vigour, the climate is apt to tell enervatingly. It is, or used to be, noticed

Photo T. B. Blow

Native Barber

Photo. T. B. Blow

Native Tailor and Knife-grinder

how, when old Indians took a religious turn of mind, it often ran into narrow moulds, shaped by studying obscure prophecies under a blinding sun, and perhaps by the antagonizing effect of heathen fanaticism. At the present day educated Anglo-Indians are kept less out of touch with thought and culture at home. But the more rapid and frequent communication with Europe turns away their attention from the land which most of them hope to get out of as soon as possible; and many of our countrymen learn little about their place of banishment beyond such features as are forced upon their notice by daily necessities.

The old Company's servants were more at home here, entering into the life of the people in a way that lowered their own moral standards; so that on the whole the closer connection with England makes for good on the Englishman's self-respect, while it keeps him more aloof from the strangers among whom he spends his shorter spells of exile. Touching, indeed, is the loyalty with which he looks to "home" for his patterns in small matters as in great. Wherever he be stationed, among the muggy swamps of Bengal or on the burning plains of Scinde, one notes with amusement how the banished Briton would fain cling to his own customs and costumes; how, as soon as the setting sun allows, he throws off the thick topee for whatever cap may be the mode at Aldershot or St. Andrews, and how at night he scrupulously arrays himself in the combination of black cloth and starched linen that seems about the most unsuitable dress that could be devised for such a climate. In certain places it is, or was, the fashion for a dinner guest to arrive in the orthodox swallow-tail, attended by a servant carrying a cool white jacket, which a considerate host would presently invite him to assume. On the Calcutta side the chimney-pot hat is still an idol of respectability. Yet such superstitious mortifications of the flesh sometimes shape themselves under heathen influences. That the Anglo-Indian Mrs. Grundy is an incarnation of Siva seems shown by the fact of the correct visiting-hours in India being its perilous noon, when no sensible person would stir from home, unless under the force of duty or social religion. What seems another false doctrine and practice is of truly British origin. Besides the *chota hazri*, "little breakfast", with which he begins his early day, this son of beef and beer professes to "keep up his strength" by three heavy meals — but some wiser stomachs omit the mid-day "tiffin",—eating an amount of meat which the example of the temperate natives should show him to be needless if not harmful. And if, under the constant provocation of this sweltering sky, he give way to his nation's besetting sin, it has become proverbial in India how every glass makes a "peg" in his coffin. In this matter of food and drink, indeed, it is hoped that our countrymen are learning to consider more carefully their own good and that of those around them. The Anglo-Indian, if he would remain a good Englishman, must always be specially on his guard both against corrupting influences from within and from without. His great danger here, a danger best resisted by those most qualified to exercise authority, is that of "getting the wind into his head", unless it be that of getting his liver out of order. To an outsider it is instructive to note the difference between those temporary exiles on an outward and on a homeward voyage. Going back from England, refreshed by contact with their mother earth, they make the best of company. Leaving India, they are more apt to be found cliquish, snappish, given to petty jealousies and quarrels and that attitude of mind known as "putting on side", for which Indian slang substitutes the expressive phrase used above.

The globe-trotter, with his note-book, by no means such a favourite as he is now a frequent figure in India, perhaps owes some of this resentment to an uneasy consciousness that his notes may not always be of admiration for his fellow-countrymen here. That "G.T.", as he is belittled, rightly thinks that more and not less English interest in this vast dominion of ours would be an advantage, even if it ruffled men who might profit by unprejudiced criticism. The shrewd and painstaking traveller, indeed, may well carry away a better impression of India as a whole than is gained by residents who trouble themselves only about their own vicinity or department. Yet "Mr. Paget, M.P.," does ill to dogmatize on all

Indian Beggar. (From a photograph)

Indian problems after a cold-weather tour. What forces itself on his attention is the unsympathetic manner that too much alloys the Anglo-Saxon's dealings with an inferior race, born to vices of abasement for which we masterful strangers make small allowance. What he may not see on his hasty tour are the efforts after justice of such a government as has hitherto been unknown in India, the patient labours of over-burdened officials, the devotion to duty which so often meets no reward but an early grave.

Of late, it must be noted, our proconsuls have been tried by a spirit of unrest and agitation, giving cause for anxiety in more than one region. Bombs, assassinations, seditious writings have called for special provision of summary justice. But this cloud, perhaps blown over Asia from the smoke of Japanese victories, may pass off without any perilous storm. Discontent has been loudest among those least fit to make doughty rebels; when it spread into the Punjab, indeed, it was more disquieting. A less humane government would be in no danger from such enemies as flabby baboos educated in words rather than deeds. It is we ourselves who have taught the Hindoo journalist to prate of political rights quite exotic in the East. As a safety-valve for native opinion an Indian gentleman has for the first time been placed on the Viceroy's Executive Council; while a new Legislative Council, partly elective, includes Hindoo and Moslem members.

POLITICAL DIVISIONS AND ADMINISTRATION

This is not the place to tell that marvellous tale of English conquest, which in little more than a century supplanted the Great Mogul's empty title by the firm rule of the British empire. Our trading settlements, fixed about three points of the coast, had made the core of the separate presidencies Bengal, Madras, and Bombay; and when Warren Hastings was appointed the first governor-general, Calcutta, then the base of our most important advance towards dominion, became the chief seat of his power. Here rules the viceroy, helped by the deliberations of his Executive and Legislative Councils, and hampered, as Anglo-Indians are apt to think, by the votes of public opinion at home. At Madras and at Bombay we have governors and councils of subordinate dignity. But the administration of India has outgrown the Presidency system, still represented by different army *cadres* and divisions of the civil service, as by the *esprit de corps* of the Madras and the Bombay "sides".

Our Indian possessions are now grouped into further provinces, ruled by governors, lieutenant-governors, or commissioners, all responsible to the vice-regal centre, while a few places here and there stand directly under the governor-general, as Alsace under the German emperor. Among these territories immediately administered by us are islanded a number of states trusted with a more or less nominal independence, whose native potentates, bearing various high-sounding titles, reign indeed, but govern only under the eye of British residents or agents, a check on their power such as public opinion should be in a more developed society. In some cases it is part of the arrangement with such protected and superintended states that a proportion of their military force, trained by English officers, shall be at command of the Imperial Government for common defence. Sometimes the British authorities undertake to collect or administer the revenues; or this may be left to the native ruler. Here he will be carefully watched and checked; there, again, it is judged best to let him deal with his own people in his own way, so long as open scandal be avoided. A great point of difference is as to whether he may or may not be trusted with the power of life and death. There are other details of power and dignity that depend on the circumstances in each case; but all these titular sovereigns, more or less worthy to rule and contented to be ruled, know well how they hold their sceptres only on sufferance; and the descendants of the old nizams and nabobs seem now chiefly ambitious about such distinctions as the number of guns in the salute granted them by the Paramount Power, to which a few of the most enlightened princes show themselves wisely loyal. In all, besides the larger body of our own subjects, there are over sixty millions of inhabitants for whose welfare we have thus become responsible.

Let us now take a rapid run round these territories, noting the main character and prominent points of each; after which we may return to visit the chief cities more at leisure.

Bengal, the richest and the most thickly-populated province of India, is mainly the populous region watered by the Ganges and its tributaries, on which stand famous cities—Moorshedabad, the capital of the nabobs, now in part ruined, but in Clive's days to be described as the equal of London for wealth and population; Patna, centre of the opium industry, at one time the chief place

in India, still extending for 12 miles along the sacred river; Dacca, another ex-capital, renowned for its delicate muslins; and many others of both historical and commercial note. Beyond the Brahmaputra and Ganges delta the Bengal territory curves round the head of the Bay of Bengal, on the eastern side of which is the important port of Chittagong. The inhabitants here are a mingling of Burmese, Hindoos, and Moslem intruders. From the coast of this gulf come the hardy Lascars who man our ships, while the Bengalee of the inland plains hardly ventures to serve as a soldier, but, after a course of English schooling, is apt to be bold and free with his tongue. Bengal has come to be divided, as too unwieldy for a single administration; and the western part, including Behar, Orissa, and Chota Nagpore, is now erected into a separate Lieutenant-Governorship. This new arrangement annuls a former one that provoked noisy discontent among native lawyers and journalists of Calcutta, by which the largely Mohammedan Eastern Bengal, having Dacca as its capital, was for a time joined with Assam, since restored to its former status as a separate province.

The Chief Commissionership of Assam is a region of mountains and valleys well watered by the Brahmaputra and its countless tributaries, whose forests, rice-fields, and tea-gardens, not to speak of mineral wealth, promise for it a prosperous future. As yet it is thinly peopled by a very mixed population, and contains no large cities, though overgrown remains of palaces and temples mark a state of former civilization. Its official seat, Shillong, a few years ago half-ruined by an earthquake, stands nearly 5000 feet up in the Khasia ridge, bordering the Brahmaputra valley on the south, beyond which the Assam territory extends over another watershed towards the Bay of Bengal. Assam is parted from Burma by a group of dependent hill states, one of which, Manipore, came into notice in 1891, when here the scenes of the Mutiny were re-enacted in miniature.

North of Assam the Himalayas are bordered by the independent strip of Bhutan, whose scattered Buddhist population of Tibetan race, fringing off into wild tribes, is kept in order by British military outposts. West of this, Sikkim, in which rises the Tosti, a river that has shifted its course between the Brahmaputra and the Ganges, is under British protection. On the north, at the foot of Kunchinjinga and other Himalayan giants, this state borders Tibet by lakes at the height of Mont Blanc; and on its southern edge, connected with the plains by a mountain railway, stands Darjiling, one of our great hill sanatoriums, about the grand beauties of which some visitors grow enthusiastic to the point of entitling it the noblest scenery in the world, while others grumble over freaks of weather that remind us of our own climate. Farther west, stretching in lofty terraces under Mount Everest and for 400 miles beyond, Nepaul, with its capital Katmandoo, and its powerful army whose lord is overlooked by a British resident, forms politically such a barrier towards Tibet as the malarious Terai does between itself and British India. From its warlike hill-tribes are recruited those regiments of small, hardy Ghoorkas whose services have become so much appreciated in our Indian wars.

South of Nepaul, the ex-kingdom of Oudh, peopled by a strain more manly than its neighbours of Bengal, along with Rohilcund, whose inhabitants also show the vigour of their Afghan blood, and the central plains of the Ganges, over 100,000 square miles in all, make up the Lieutenant-Governorship of the North-Western Provinces and Oudh, a name now exchanged for that of the "United Provinces" of Agra and Oudh, to avoid confusion with the new

North-Western Frontier Province mentioned below. Allahabad, "City of God", is the capital, and in this division, on the Ganges or its affluents, come many of the most famous cities of India: Benares; Mirzapore; Lucknow of glorious and Cawnpore of sorrowful memory; Agra, the city of Akbar; Bareilly, the chief place of Rohilcund; Meerut, where the Mutiny broke out; and Rampur, in a small native state noted for its shawls.

Separated from the south side of the United Provinces by the native states of Bundelcund, are the Central Provinces, a Commissionership containing

General View of Darjiling and "the Snows". (From a photograph

some of the wildest and most varied regions of the peninsula in the broken country lying between the courses of the Nerbudda and the Godaveri, where mineral riches await development. The population here is not so thick, under ten millions in an extent of about 85,000 square miles; and there are few large towns. Nagpur is the chief city; another important commercial centre being Jubbulpore (Jabalpur), on the railway between Bombay and Calcutta.

To the north of this British territory lie the quasi-independent domains of Central India, chief among them Gwalior and Indore, ruled by the descendants of Mahratta potentates who bear respectively the titles Scindia and Holkar. Farther north, bordering the Punjab, a great hilly region is covered by the many states of Rajputana, large and small, under their Rajput princes, some of whom seem more fit to rule a spirited people than the effeminate tyrants we have elsewhere displaced. The principal of these are Mewar, better known by the name of its capital Oodeypore (or Udaipur), Marwar (Jodhpore), and Jeypore (Jaipur), whose modern capital makes one of the handsomest cities of India.

North of Rajputana comes the Punjab, in which lieutenant-governorship

is now included Delhi, the Mogul's capital. The administrative centre of the province is Lahore. Almost as large a place, and flourishing by its trade with Cashmere, is the neighbouring Amritsar, whose "Golden Temple" on the "Lake of Eternal Life" marks it as the sacred city of the Sikhs, who have been called the Protestants of Hindooism. The "Granth" is their holy book, and the name Sikh, meaning "Disciples", denotes not so much a nation as a religion, founded about the time of our Reformation by Nanak, a prophet who sought to extract the purer spirit of rival creeds and to throw down the barriers of race and caste.

Halt of a Caravan at Peshawar

Photo. Bourne & Shepherd

Inspired by this elevating faith, and tempered by persecution, his followers, while falling away from their prophet's high ideals, became the "Ironsides" of a warring world, and set up a loose federation that dominated the north-west of India till, half a century ago, they came into collision with the British. Their conquest gave us more trouble than that of any other Indian people; but these foemen worthy of our steel have since proved our most congenial and trustworthy subjects, supplying the manliest part of the native army, and serving us not less well across the sea, in Africa and China. Several districts here are still granted a feudatory self-government, Puttiala the largest of them, with over a million inhabitants. The Punjab extends to the foot of the Himalayas, from whose southern slope one looks down on it lying flat as the palm of a hand, lined by its rivers.

Beyond the western frontier of the Punjab our military station Quetta, an advanced post thrown out into Beloochistan, guards the way to Kandahar at the south end, as in the north that of Peshawar watches the Khyber Pass and the road to Kabul. This outlying dependency, as well as Afghanistan, from which

India has been so often invaded, will be dealt with apart. Here, almost within sight of our cantonments, dwell the wild Afridi and other clans, with whom during the last half-century we have had so many border wars, down to that costly one of 1897, fruitful in glorious deeds like the storming of Dargai and the defence of Chitral. For the better management of such troublesome neighbours this corner has lately been cut off from the Punjab and formed into a separate North-Western Frontier Province to be ruled by experienced officers under control of the central Government. Rough and ready rule best fits these bloodthirsty tribes, who have no respect for law but that of the strong hand; and military power is specially needed here, the value of this barren hill country being as a defence of India—to speak plainly, as a chessboard on which to make the moves of a game that may have to be played with Russia. Another great military station is Rawal Pindi, east of the Indus, by which goes the road into Cashmere and over the Himalayas to Gilgit, the northern outpost of our Indian empire. The beauties of Cashmere have been already spoken of, and the features of Srinagar, its largest town; but its official capital is Jammu, on the southern edge, to which goes off a branch from the railway that, on military considerations, has been pushed on to Peshawar.

From the Punjab southwards stretches the long line of the Bombay Presidency, beginning with that hot and dusty province of Scinde, a strip of alluvial plain bordered by sandhills, where the thermometer is said to rise to 130° in hot seasons. This has Kurrachee for its chief port, and Hyderabad on the Indus for its capital, to be distinguished from the state bearing the same name in the Deccan. South of Scinde come the Runn of Cutch, that strange region already described; then the innumerable small principalities of Kattyawar; and Baroda, ruled by a native potentate proud to bear the title of Guicowar, "Herdsman", handed down by his Mahratta ancestors. This brings us to the rich plain of Gujerat, stronghold of the Jains, where Ahmedabad stands in British territory, junction of a narrow-gauge line which on this side makes the shortest route to Delhi; while Surat, one of the earliest foreign settlements, has dwindled from its rank as the greatest port in India. That place is now taken by Bombay, of which due mention will be made presently. Hence the Konkan runs on between the sea and the western Ghauts, where Poona, Satara, Kolapore, and other towns were strongholds of the Mahratta freebooters that had almost anticipated our conquest of India. Poona's elevated situation has recommended it as chief cantonment for our troops; and it is a place of over 160,000 people. In the south of the Bombay territory an enclave is formed by Goa, still possessed by the Portuguese, who were our forerunners here, their old city's former richness attested by its magnificent cathedral and the shrine of St. Francis Xavier, the great Jesuit missionary, while its main industry nowadays seems to be the supply of those "Portuguese" Christians so much in demand on this coast as servants, who are practically more of negroes than Portuguese.

Between Bombay and Madras, in the Deccan, are the Mohammedan conquests, Hyderabad and Mysore. The former, lying between the Godaveri and the Krishna (or Kistna), is the largest independent state in India, and its capital of the same name the largest native city, "an Indian Damascus or Cairo", inhabited by some 450,000 people, among whom fierce Moslem swashbucklers strut domineeringly, but are held in restraint by our strong cantonment at Secunderabad, a few miles off. Near the city of Hyderabad, also, a high crag is crowned

by the gloomy fortress and ruinous town, Golconda, once the capital, famed as a market rather than a mine of diamonds, in future more likely to thrive through mines of iron and salt. The hilly Deccan shows many a high-perched fortress that now may be allowed to fall into picturesque ruin; and often its rocky ridges have been weather-worn into the shape of castles and temples. In the northern corner of the state, not far from Aurangabad, where the memory of Aurangzebe's conquest is preserved by sumptuous monuments, as well as by the city's name, are the amazing temples of Ellora, representing various phases of Indian faith, Buddhist, Brahman, and Jain, whose votaries have in turn excavated and carved the solid rock with a labour equal, it has been calculated, to that spent on the Pyramids of Egypt.

Gopura, Madura Temple. A characteristic example of Dravidian architecture

Mysore is another large protected state, with its capital of the same name, not far from the older one, Seringapatam, where after much ado we overthrew the tyrant Tippoo Sahib, who had inherited this dominion from his father Hyder Ali, a Moslem soldier of fortune. The English head-quarters are at Bangalore, now, after Madras, the most populous place (160,000) of South India; and, standing 3000 feet high, it has one of the best climates in the peninsula, so that here among apples and strawberries our soldiers find themselves not so outlandishly exiled. Coorg, on the south-west side, is a small state rich in virgin forests, that, with those of Mysore, begin to be cleared for coffee plantations.

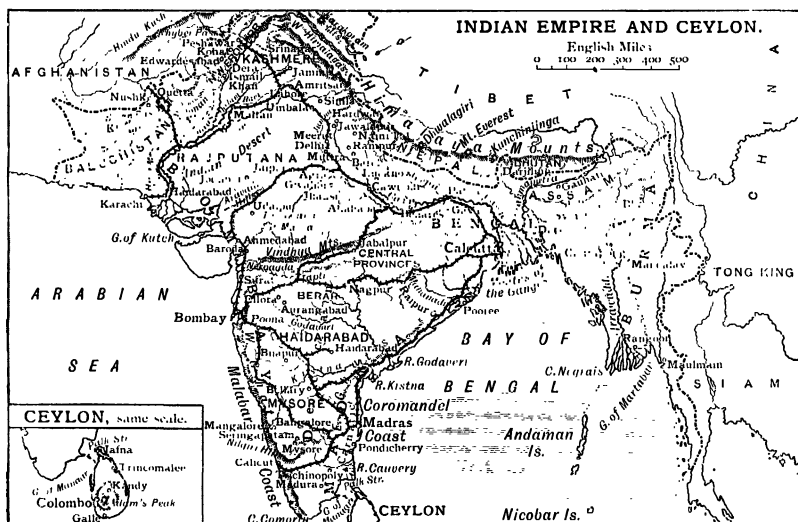
The Madras lowland territory stretches beyond the Neilgherry Hills, with their lofty sanatorium Ootacamund, then up the Malabar coast, where are the ports, Mangalore, a centre of missionary effort, and Calicut, still the largest city on this coast, the origin of *calico*, and the goal of Vasco da Gama's momentous voyage round the Cape of Good Hope, 1498. The southern strip of the Malabar

coast is taken up by the native states of Cochin and Travancore, with their tropical vegetation. At this end Christianity has struck deeper root than in other parts of India. There is a thriving Protestant mission at Tinnevelli, below the Cardamom range which separates Travancore from the plains of the Carnatic. Round Cape Comorin the Carnatic extends along the surf-bound Coromandel coast. Inland, on this side, are cities of old renown: Madura, once the capital of South India; Trichinopoli, in its rich garden land; Vellore and Arcot, where Clive turned the tide of conquest in favour of his country; Bellary, near which are the vast ruins of a Hindoo capital—all overshadowed now by Madras, which in Clive's day could not defend itself against the French.

To the south of Madras is Pondicherry, where 100 square miles or so remain to France as a monument of that short struggle in which her Clive and Hastings were so ill-backed by their country. This, along with Chandernagore on the Hoogly and other small factories on the coast, lets France still count some quarter of a million subjects in India, while Portugal has about twice as many, and the early Dutch and Danish settlements have wholly vanished. One French factory is at Masulipatam, between the Kistna and Godaveri deltas, which was ruined about forty years ago, and 30,000 of its inhabitants perished by one of the destructive cyclones of this region. To the north of the Godaveri is the anchorage of Vizagapatam, an ancient city that has also suffered from the sea, but retains its fame for ivory and silver work. Some way north there is found a better haven at Bimlipatam, which may be expected to grow into prosperity now that a railway has been extended along the Madras coast to Calcutta. Another reviving port of the Circars, as this district is called, is Kalingapatam, which seems to have the safest anchorage for over a hundred leagues. All this side of India feels the want of good harbours against the surf lashed on its flat coast across the Bay of Bengal. Thus we come round again to the Bengal banks and the Hoogly delta, whence the heart of our rule pulsates to every corner of the continent.

It is difficult in a short space to describe the system of English government, especially as some details of administration differ in the separate presidencies. The unit of organization is the "District", perhaps containing a million souls, its "Station" being the head-quarters of an officer, whose title of collector recalls the old days when the raising of revenue was the main part of his duty, but who now may have to exercise both executive and judicial functions, as well as those relating to the important question of land assessment, by which taxes are collected either directly from the cultivator or indirectly through a landlord whose original status was that of a tax-gatherer under the native prince. There is also an independent machinery of judges, who in the lower ranks and sometimes in the higher are natives. Half a dozen districts will be grouped as a "Division" under a commissioner; and a further aggregation of divisions will make a chief commissionership. Limited as it is by control of the central Government, felt in an embarrassing use of correspondence and red tape, the power of these officials is very real, and much depends on their own initiative and force of character. Many a quiet old gentleman who spends the evening of his days playing whist and grumbling over the east wind, at Cheltenham or Bournemouth, has ruled with almost kingly authority over a country equal in area and population to a European kingdom. There is no legal barrier to a native's advancement in this honourable service, and of late it has been the official policy to encourage such

advancement; but however able to pass examinations, the gifted Oriental is apt to be found wanting in moral backbone, at all events in those qualities of temper, moderation, and sense of fairness that eminently belong to an English gentleman. .ndian notables are now nominated or elected as members of the legislative councils; and to native citizens is trusted a large share in municipal government.

The covenanted civil service, whatever it may have been in the past, is now recognized on all hands as distinguished for honesty, ability, and good intentions. The weak point of its administration is the extent to which it must depend upon inferior native officials and police, who are not to be depended on except for trying to corrupt justice after the manner of the East. A clear-headed magistrate,

even after long knowledge of a people who love litigation as a game to be played with all help of perjury and bribery, may be hard put to it in sifting out truth from falsehood in an impenetrable mass of contradictory testimony, and often must make a shot at the rights of the matter as perplexed by obsequiously voluble suitors, skilled in arts that would shock our Chaffanbrasses and Buzfuzes. There is indeed something in the evenness of English justice not congenial to Oriental ideas. A native saw aptly compares the British rule to a level highway, whereas "in the raj of the rajahs there were holes and hills". The present generation forgets what this rule really was; but perhaps our childlike subjects would rather take the risk of being cruelly executed or fleeced at the pleasure of a tyrant whose visitations are rare than bear the regular equal pressure of such burdens as we have laid on India.

But if we have failed to gain the goodwill of these people there can be no doubt of their respect, won largely by a quality which among them is as rare as with well-conditioned Englishmen it seems a matter of course. No native trusts another as he trusts the bare word of a sahib. Our truthfulness, our evident desire to be fair, our moral as well as physical courage,

form the prestige that makes a single unarmed Briton master among a million of vassals. Even a scowling Mahratta or Mussulman, who cannot forget how his forefathers once were tyrants here, is impressed by the authority of a sahib who can no more be bribed than bullied, and shows himself as straightforward as difficult to deceive. This strong and sound temper of human nature is the best support for the heavy charge thrown on our Government, which over a great part of India has to be at once landlord and tribune of the people, tax-gatherer and almoner, judge and advocate, defender and keeper of the peace.

Our Indian satraps, if they sometimes feel a little astray in the jungle of indigenous customs, through which our legal codification has opened doubtful highways, may take full credit to themselves for improvement in means of intercourse. This ought to be known at home, now that a trip through the Suez Canal is made easier than it was to cross the Alps a century ago. Travelling in India is at least not expensive, though one of the reasons given for that grudge against the globe-trotter, already alluded to, is that he helps to raise prices and wages. The chief drawback for him may be a want of accommodation on the European standard, though here one need seldom take the risks of adventurous travel. The official or sportsman has the advantage of moving about with his camp and followers. The proverbial Anglo-Indian hospitality has naturally been worn a little thin by more frequent invasion of strangers. The native *serais*, providing only shelter, like our old English "cold harbours", are out of the question for Europeans; and not every globe-trotter is accredited to the sumptuous but uncomfortable entertainment of rajahs or other rich natives, who may not eat with him, still less introduce him to their families. The dâk-bungalows, kept up on the roads by Government, are not always satisfactory to a fastidious traveller, who sometimes finds himself reduced to sleep in the mosquito-haunted refreshment-rooms of a railway station. Comfortable boarding-houses flourish in Calcutta; and here and elsewhere the English clubs are the best quarters for single men privileged to make use of them. The hotels in large towns are seldom good, for want of European management, but they are cheap, a common rate being five rupees a day for lodging and meals; and as the number of guests increases some improvement may be hoped for in supplying their needs after a business-like manner, instead of leaving them exposed to the crowd of useless menials, hangers-on, pedlars, touts and promiscuous candidates for backshish, allowed to swarm round the stranger like flies in lieu of more efficient attendance. Much depends upon the servant or servants, without whom a sahib can hardly make his way; and the choice of a "boy" is a point on which the globe-trotter must take experienced counsel. Even with the liberal pay which such a temporary courier expects, and the extra profits he finds means to make out of his master, he proves a cheap enough appendage. At Calcutta a good servant may be hired for half a rupee a day, and less for a lasting engagement; on the other side of India wages are higher.

Everything is cheap, so long as commodities of the country are concerned, and seems all the more so from the depreciation of silver, which makes a sovereign go so far. The rupee, nominally worth 2*s.*, has now a fixed exchangeable value of 1*s.* 4*d.*, so that each of its 16 *annas* is practically a penny. Europeans will not much concern themselves with the further division into *pice* and *pies*, still less with the minute shell money that sometimes passes among the natives. The lordly Anglo-Indian, indeed, scarcely troubles himself to carry coin,

pencilling a *chit* that may be presented for payment later on, and leaving the settlement of petty accounts to his servants. Fifteen rupees make a gold mohur, like our guinea, a denomination rather than a coin, which here also fixes a fee for English physicians. Gold, when put into circulation, has been found to disappear into the hands of hoarders or jewellers. In accounts Rs. 100,000 figure as a *lac*, and 100 lacs as a *crore*, the possessor of which is an Indian millionaire. In dealing with large sums it is usual to count by Rs. X. *i.e.* tens of rupees, a denomination once equal to our pound, but now representing 13*s*. 4*d*. Bank notes for 5 rupees and upwards are used.

There are at present about 26,000 miles of railway in India, connecting the chief cities and ports. The most important line is that which for military reasons

Photo. Bourne & Shepherd

Reversing Station, Poona Railway

has been pushed from Calcutta beyond Lahore to the distant north-western frontier. Allahabad is the junction of a line to Bombay, which by another line through Gujerat and Rajputana has direct communication with Delhi. From Lahore a line goes down the Indus to Kurrachee, with a military branch beyond Quetta to the edge of Afghan territory, and another branch now being pushed towards Persia. Madras is connected with Bombay and with Calcutta; then from Madras lines run southwards both to the Malabar and Coromandel coasts. It may well be that the laying of railways over a flat plain proves an easier matter than keeping them supplied with fuel and water. The chief difficulty often is found in bridging ground liable to inundation, which may have to be overcome by solid embankments and viaducts a mile or two long. In the hills the steepness of gradients has called forth some fine feats of engineering, as in that line mounting from Bombay to Poona by turns so sharp that at one point there is nothing for it but to reverse the direction of the train. A broad and a narrow gauge are used, which may require a change of carriage, as on the route from Bombay to Delhi.

The fares on these lines are low, first class costing about as much as third in England. The first-class carriages, according to the exigencies of the climate and of long journeys, are constructed as spacious saloons, with movable upper berths, to accommodate four passengers at a pinch, each compartment supplied with a lavatory, perhaps with a shower-bath, with double-roofs, sun-blinds, tatties, and other appliances for keeping out heat and dust, to which the passenger adds for himself comforts in the way of bedding, wraps, baskets, bottles, ice, or what not, that need a good deal of room. It is said that on certain lines coffins are carried in case of death from heat apoplexy! Carriages will be reserved for ladies and for Europeans. The right sahib thinks it a hardship to travel second class, still more in the cheaper "intermediate", and of course keeps clear of the compartments where natives huddle together in their own manner. The Hindoo takes very kindly to railway travelling, except in its punctuality; and stations are seen littered by the bedding of would-be passengers who have turned up on the platform to wait their chance of a train that may not be due till next morning, then perhaps lose it after spending hours in an attempt to beat down the price of a ticket. Time is not money in the East.

Good roads have been made all over the populous districts, and even into the hills, where required by military considerations. On these is kept up a *dâk* (posting) service, by means of *gharries*, *tongas*, or other bone-shaking vehicles, drawn by half-broken *tats*, which can go a smart pace when their heads are turned towards the stable, or if the driver's palm be duly oiled by backshish. Sometimes the roads lead perilously along the unfenced edge of cliffs, and unruly horses will not behave more quietly if a leopard should spring out on them from the woods; but fear of such risks is much matter of habit, and one has known a lady, used to this kind of travelling, who could hardly embolden herself to take a hansom-cab through London. Many of the native nobles, notably the Rajput princes, share our English taste for horseflesh; and those *tattoos*, or country ponies, as well as finer Eastern breeds, are outweighted by the big "Walers" now freely introduced from Australia. To keep at least a pony is almost a necessity for the sahib. In towns, sumptuously equipped and attended carriages are a point of dignity with both races, where *tikka-gharries* can be hired at low fares, arranged through an inevitable dispute with the driver. The ordinary native delights to ride on an *ekka*, a sort of miniature Irish car meant for one, but often packed with half a dozen passengers clinging on beneath its gaudy curtains. In the "districts", or, as we should say, in the country, creaking bullock-wagons and carts are much used even by Englishmen, where the hard-worked ox is not only put to plough but laded with packs. The buffalo also is worked for draught and loads, or sometimes as a steed. In the mountains even goats and sheep are pressed into service as beasts of burden. The sulky camel does much transport work in the north-west, as does, all over India, the patient elephant, though mounted rather for show than for practical use. The native *palanquins* and other litters are in some places supplemented by the Japanese rickshaw, in which the unseasoned European feels a little ashamed to let himself be drawn as in a perambulator; but in the East nobody cares to walk who can afford to ride or be carried. Among the hills there is a system of *corvée*, by which the villagers have to shoulder on a traveller and his baggage at a fixed charge. Cycles and motor cars make novel activity in Indian travel.

The canal system is in part used for transit as well as irrigation; and back-

waters and lagoons on the coast have been adapted as serviceable waterways. Steamers ply on the lower reaches of the great river courses, which can be navigated higher up by suitable craft; but in most cases the flow of Indian streams is too irregular and their channel too impeded or too shifting to let them be highroads of commerce. In the sluggish deltas, where inundations will naturally be more common, embankments are needed rather than canals. These great public works, if not its most picturesque features, are among our best boons to India, and do honour to the service in charge of them.

There is a good and cheap postal service, the postage to any part of the Indian empire being half an anna, or a pice (farthing) for a post-card. In its money-order system the Indian Post Office might give lessons to our own. A noticeable fact here is the free use of embossed envelopes, for the posting of letters by servants, in whose hands stamps might prove too adhesive. India has more than 50,000 miles of telegraph lines, affording a sometimes disastrous gymnasium for monkeys and a perch for beautifully-coloured birds.

Unless in cases of atrocious barbarism, like *suttee*, our Government tolerates all religions, and missionary work is a matter of private enterprise, carried on by American, Moravian, and other foreign societies, as well as by British ones, whose diversity of doctrine would surely puzzle the native if he were not accustomed to his own various cults of Vishna, of Siva, or so forth. Under five bishoprics there is an establishment of chaplains for the service of the Church of England, sorely handicapped here by the fact that in the last half-century its centre of gravity has shifted from the pulpit to the altar; so its expensive "padres" have much ado to serve their parishes of perhaps a hundred miles in extent, where under the former dispensation any officer could acceptably read the service and perhaps a sermon to out-of-the-way congregations, visited only at longer intervals for the priestly ministerings that are now more esteemed. The Roman Catholics have the advantage of a numerous and cheaply-supported clergy of lower social rank, the majority of them indeed black men "of sorts", not so remote in feeling and sympathy from the natives. This Church, first in the field with its adaptable version of the Christian faith, has made by far the most way in conversion, chiefly in the south, where its mission stations are of old standing. With the exception of these hereditary converts, it is a painfully significant fact that the English in India see cause to distrust so-called "Christians", who ought else to find ready employment as servants. The Protestant sect that of late years seems to make most impression is the Salvation Army, whose noisy methods and self-denying adoption of native frugality affect the Hindoo mind more than the arguments of graver teachers. A married gentleman, living comfortably in a bungalow and driving in a buggy, is not the native type of holiness, nor does the lightness with which their own religious obligations sit on most Englishmen go to foster conversion of believers worth converting.

Protestant missionaries labour on against all discouragement, but in most cases they are fain to confess that they must sow their seed in the indirect way of education, through which it is hoped eventually to influence natives who attend their schools without any pretence of listening to their doctrines. The Government is not less zealous in promoting education, too much so, judge some, looking to the swarm of baboos annually sent out into the world with a turbid flow of

English and a turn for glib discontent when they find no satisfactory career open to their physical and moral qualities; while the main effect of the pains spent on them may be that they have shaken more or less loose from the restraints of their own religion without entering into ours. Universities have been established at Calcutta, Bombay, Madras, Allahabad, and Lahore, with affiliated colleges, in which perhaps the most useful work is done by the teaching of medicine and engineering. A hopeful sign of progress is the beginning made in female education, so that at the universities native ladies sometimes take medical degrees. High schools and elementary schools are multiplying both in our own states and

Native School, Jeypore

Photo. T. B. Blow

the protected ones, whose more enlightened potentates establish colleges under English principals. A remarkable institution is the College of Princes at Ajmere, a sort of Indian Eton, where the sons of haughty Rajputs are taught to play our games, like the "Ranji" who has made himself so popular on English cricket-fields. Another is the Martinière Colleges, for Eurasian boys and girls, at Lucknow and Calcutta, founded a century ago by General Martin, a French soldier of fortune; since his time Lawrence and other philanthropists have provided several similar asylums for the children of English soldiers.

In such ways we have benefited that vast nation, whose title to be a nation lies in our domination of rival races, creeds, and castes. A certain section, to whom we have taught the language without the spirit of free government, begins to raise loud complaints of grievances inseparable from a rule that is still necessarily of the sword. A practical consideration for these grandiloquent agitators would be the worth of life and property to banya or baboo on the day the last British bayonet left Indian shores. At present we keep the peace with an

army of over 200,000 men, about a third of them Europeans, in whose hands, since the Mutiny, is nearly all the artillery that plays such a decisive part in modern war.

INDIAN CITIES

Numerous as they may look on a map, the great cities of India are few in proportion to the population. Some of them straggle over an undue extent of ground, originally a group of villages run together, interspersed with fields and the enclosures of enormous palaces where Dives has the hovels of Lazarus close packed in thousands at his gates. Narrow lanes wind through the masses of humble dwellings; a high shady street, enclosed by gates, may form the chief bazaar or shopping quarter, where patient artificers are seen at work near the stalls heaped with their handiwork; then there are wide openings round tanks or fountains or by the river banks, at which every morning thousands of dusky figures gather to go through their ablutions, tooth-cleaning and hair-dressing also being done in public.[1] High above such a hive of humble industries a prominent feature will often be the huge citadel, at once fort and palace of its old lords, which crowns a rocky height overlooking the city, and outside its walls perhaps appear the far-spread ruins that tell a tale of former greatness wasted by plunder or decay, or of the whim of some tyrant who might shift his capital by capricious decree. Then within a few miles of human life in myriads the ground may be choked by a rank jungle sheltering fierce fangs and poisonous germs of death.

If the city be an English station, our "cantonments" are like to have been placed two or three miles outside, or even farther. Here round the dusty *maidan* stand the "lines" of huts in which our sepoys and sowars live with their families; the barracks of the European troops; the bungalows of the officers and officials, each in its "compound" with its straggling show of garden, often represented by a few flower-pots stuck into the dry ground; the English church that looks so exotic in this land of mosques and temples; the English club, and perhaps, in strong contrast to the picturesque donjon-keeps of native sovereignty, a modern fort's business-like entrenchments, where the community may take refuge if ever the scenes of the Mutiny come to be re-enacted. About this settlement has sprung up a "sudder" bazaar amid a squalid quarter for the many camp-followers and hangers-on of our soldiery. Some enterprising Parsee or Eurasian may have opened a European shop or hotel; and whatever cannot be bought on the spot comes from stores in the large cities, shopping at a distance being facilitated by postal arrangements that allow goods to be paid for on delivery.

[1] "Still, as ever," Sir Edwin Arnold found in his *India Revisited*, "the motley population lives its accustomed life in the public gaze, doing a thousand things in the roadway, in the gutter, or in the little open shop, which the European performs inside his closed abode. The unclad merchant posts up his account of pice and annas with a reed upon long rolls of paper under the eyes of all the world. The barber shaves his customer, and sets right his ears, nostrils, and fingers on the side-walk. The shampooer cracks the joints and grinds the muscles of his clients wherever they happen to meet together. The Guru drones out his Sanskrit shlokes to the little class of brown-eyed Brahman boys; the bansula-player pipes; the sitar-singer twangs his wires; worshippers stand with clasped palms before the images of Rama and Parvati, or deck the Lingam with votive flowers; the beggars squat in the sun, rocking themselves to and fro to the monotonous cry of 'Dhurrum'; the bheesties go about with water-skins sprinkling the dust; the bhangy-coolies trot with balanced bamboos; the slim, bare-limbed Indian girls glide along with baskets full of chupatties or 'bratties, of cow-dung on their heads, and with small naked babies astride upon their hips."

Though we thus hold ourselves aloof from native life, our influence has to some extent set its stamp on the more prosperous cities, where tramways run jingling through widened streets and large open markets make a motley show of commodities, among which the sewing-machines of the West appear beside the tinselled fabrics of the East. To see Indian life in its characteristic aspect one must go out into the villages, each so like another that our eyes can hardly make out any difference except of size. Each has its cluster of huts, surrounded perhaps by a mud wall or a hedge of prickly cactus or bamboo; its shaded tank,

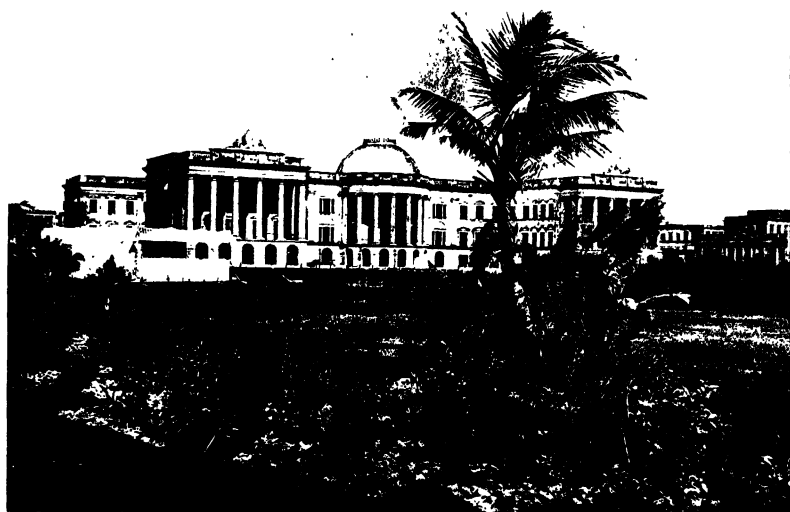
Photo. Bourne & Shepherd

Native Bazaar, Alipore

where the cattle gather to be watered morning and evening, or its deep well, descended into by a flight of steps; its temple of clumsy idols; its village green; its ancient tree, round which the old men sit smoking their hookahs in the cool of the evening, exchanging gossip or listening to the stories of which they are as fond as any children. Each of the inhabitants is what his father was before him —husbandman, smith, shoemaker, potter, barber, scavenger, or the like,—and he has no thought of rising in the world, knows of little beyond the fields familiar to him from his mother's arms. His time, when not given to sleep or chat, is passed in the tasks to which he was born; and so, from generation to generation, life goes quietly on as it has done for a thousand years.

The three chief cities of India owe their renown, indeed their very existence, to our domination. "We", says Sir W. W. Hunter, "make our appearance in the long list of races who have ruled that splendid empire, not as temple-builders like the Hindoos, nor as palace and tomb-builders like the Mussulmans, nor as fort-builders like the Mahrattas, nor as church-builders like the Portuguese, but

in the more commonplace capacity of town-builders, as a nation that had the talent for selecting sites on which great commercial cities would grow up, and who have in this way created a new industrial life for the Indian people."

Calcutta, which gets its name from a shrine of the cruel goddess Kali, and at one time earned from its unhealthiness the nickname of Golgotha, marks the swampy site of three native villages, now lost in the homes of a million people. The white and yellow fronts of Chowringhee, morally it not physically the West End of this "City of Palaces", look across its park to the Hoogly, bordered by

Government House, Calcutta Photo. Frith

the luxuriant Eden Gardens and the spacious enclosure of Fort William, the citadel commanding the river, farther down which are the celebrated Botanical Gardens. On the *Maidan* is now rising the magnificent memorial to Queen Victoria, a marble palace which will make a National Gallery for India. From the top of this open space, by Government House, with its dome and columned façade, one passes into a quarter of public offices, institutions, shops, churches, and other buildings, where Dalhousie Square, with its lake, is the pride of Calcutta. But for the motley population it might sometimes be easy to forget that one is in the East. Even English policemen are seen on the pavement, the native guardians of the peace not being bold enough to deal with a drunken British sailor. Yet there is some hint of Oriental habits and needs that distinguishes these solid buildings from Bloomsbury; and no want of Oriental colour appears in the crowded buildings of the Black Town, opened up as they are by the Circular Road and other avenues. In the centre of the city are the Docks, alive with vessels, from the stately P. & O. liner to the hooded Ganges boat, all thickly packed against the bank whose height makes it a quay. For

miles the city stretches up the Hoogly, past the pontoon bridge which leads to its manufacturing suburb of Howrah on the right bank. Above this is the burning Ghaut, where may be seen the grisly spectacle of dark corpses half-hidden in the smoke of crackling pyres, to be flung into the river that often bears down the loathsome bodies of men and animals swirling on its turbid flood. Yet this sight seems no more repulsive *memento mori* than Christian cemeteries, whose mouldering monuments combine Oriental hugeness with the ugliness of Georgian days. For miles and miles still the buildings extend up this busy flood, fringing away into more scattered villas, temples, and gardens. About a dozen miles above comes the station of Barrackpore, where the Viceroy has his leafy Windsor.

From Calcutta to the sea is nearly 100 miles of tortuously-difficult navigation, to be undertaken only in daylight under the guidance of a well-trained and well-paid staff of English pilots, Diamond Harbour making a half-way anchorage. This gives Calcutta the advantage of being unassailable by a hostile fleet. But its position as a port has been so much subverted by the Suez Canal that it became a question whether the capital of India should not be transferred to some more healthy and central situation, as might have long ago been done if the vice-regal court had not Simla to take refuge in during the hot season. The sacred city of Allahabad had been suggested, as a central knot of railways, also such elevated stations as Poona on the side of the Western Ghauts, and other places had their claims put forward; while, strong in the possession of expensive public buildings, Calcutta was naturally unwilling to give up a rank it gained rather by accident than by merit. But when for the first time a British sovereign visited India, after his coronation, to hold a great Durbar at Delhi, King George V there announced the transference of our capital to that historic city, near which a new seat of government is being built.

Bombay, now the nearest great port to England, as well as chief seat of the cotton trade, bids fair to become the most thriving city of India, and lately threatened to surpass Calcutta in population, before the outbreak of plague gave its growth a check that may be only temporary. This fine city, that came to us as dowry of Charles II's Portuguese bride, stands on a low, narrow island connected by causeways with the larger island of Salsette, and that again with the mainland, so as to form a point locking in the bay, dotted with other islands, where all the world's navies might lie in the best harbour of India. The town mainly occupies the point, open on both sides to the sea and the breezes that temper its relaxing and equably warm climate. The extreme end is the narrow reef called Kolaba, above which the name of the Fort marks the first European settlement. Landing here at the Apollo Bunder, one passes by a long line of handsome public buildings into a business quarter where, but for the trees that adorn it, one might sometimes believe one's self in Manchester or Liverpool; and thence by the Esplanade and along the Maidan to a railway-station which is one of the largest and architecturally perhaps the finest in the world. Then comes the inevitable contrast of the native quarter, where Oriental glow and tawdriness mingle to make the picture one expects under a dazzling sun, though again Lancashire will be suggested by a regiment of tall chimney-stacks befouling the cloudless sky.[1] Beyond the native town is Byculla, an older English quarter;

[1] "The decoration of Bombay henceforth is its people," as Mr. G. W. Steevens aptly says. "Under the quaint sun-hoods that push out over the serried windows of the lodging-houses, along the rickety, paintless balconies and

on the other side, round Back Bay, projects Malabar Hill, covered with choice mansions and villas among which is the residence of the Governor; and above the ridge stand up those mournful Towers of Silence, in a garden bristling with thorny trees upon which the vultures cannot settle for their loathsome meal.

Bombay is more expensive to live in than Calcutta; its contracted site makes house-rent so dear that some Europeans are content to pitch tents for themselves on the sea-shore, where evening breezes temper the damp heat. If their climate is rather relaxing, the Bombay people are lucky in being easily able to escape it.

Kalbadevie Road, Bombay (From a photograph

A zigzagged railway carries them 2000 feet up the Ghauts to Poona, the chief military station of the presidency, once the capital of the Mahrattas, whose last Peishwa, from the temple-crowned rock in its lake, saw his army scattered by our troops. Matheran is another hill station among grand mountain and forest scenery. In the early summer, before the rains drive them away, the Governor and his social and official train make their quarters at Mahabaleshwar, with its bungalows of red laterite near a sacred temple marking the source of the Krishna

verandahs, over the tottering roofs, only the shabbiness of the dusty and dirty plaster relieves the gorgeousness of one of the most astounding collections of human animals in the world. Forty languages, it is said, are habitually spoken in its bazaars. . . . Every race has its own costume, so that the streets of Bombay are a tulip-garden of vermilion turbans and crimson, orange and flame-colour, of men in blue and brown and emerald waistcoats, women in cherry-coloured drawers, or mantles drawn from the head across the bosom to the hip, of blazing purple, or green, that shines like a grasshopper. You must go to India to see such dyes. They are the very children of the sun, and seem to shine with an unreflected radiance of their own. If you check your eye and ask your mind for the master-colour in the crowd, it is white --white bordered with brown or fawn or amber legs. But when you forget that and let the eye go again, the scarlets and yellows and shining greens—each hue alive and quivering passionately like the tropical sun at mid-day—fill and dazzle it anew: in the gilding light the very arms and legs show like bronze or amber or the bloom on ripe damsons. You are walking in a flaring sunset and come out of it blinking."

and other rivers, where wooded points look down almost 5000 feet upon a labyrinth of jagged crags, cliffs, and jungles falling to the Konkan, beyond which shines the distant sea. Among these hills, also, is the rock-fortress of Pertabgarh, cradle of the Mahratta dominion. On one of the islands near Bombay are the famous cave temples of Elephanta, goal of many a steam-launch trip; others hardly less notable may be visited on Salsette; and most ancient and wonderful, but more out of the way, are the Buddhist rock sculptures at Karli, high up on the Ghauts.

Madras, though the oldest of the three, has not kept pace in prosperity with Calcutta or Bombay. It has the disadvantage of a surf-bound coast, so that

Photo. Nicholas & Co

Catamaran, Madras

travellers had long to land by the exciting and risky experience of shooting through the curling waves on a catamaran; and the making of a harbour, not to speak of its maintenance against violent cyclones, has proved no easy matter. The city, with about half the population of Calcutta, has for its nucleus Fort St. George, and extends for miles along a low shore whose rich vegetation sets off the dazzling whiteness of the buildings, spread over a great space by open spaces, reservoirs, and lagoons, so as to seem a city of suburbs. Among the public buildings is the Observatory, that gives the standard time to India, and makes the base of its Trigonometrical Survey. Some miles to the south are the heights of Mount St. Thomas, where this apostle traditionally tenanted a hermitage, and the Governor has his residence; then, farther south, on the coast, come the famous cave temples and pagodas of Mahabalipore. In the vicinity are other notable monuments of Hindoo devotion, here free from Moslem encroachment.

It has been remarked that early missionary publications gave us the scenery of Madras, with its palm-groves and rice-fields, as our typical conception of India; and the Madrassees, under their hot sun, are sensibly darker than the more mixed races of the north. If the thermometer does not rise so high as in drier districts, the damp heat is most oppressive, and welcome comes the relief of the sea-breeze, whose rising may strangely affect even the eye, as described by Basil Hall: "The whole landscape appeared to have given way, like molten silver, under the heat, and to be moving past more like a troubled stream than the solid ground. The trees and shrubs, seen under a variety of refractions through differently heated strata of air, seemed all in violent motion, though probably not one leaf of the

Photo. Frith

Simla, among the Himalayas, the Summer Head-quarters of the Indian Government

highest cocoa-nut tree, nor a blade of the lowest grass stirred in reality. The buildings in the distance looked as if their foundations had been removed, while the shattered and broken walls danced to and fro, as if under the influence of some magical principles of attraction and repulsion; whilst many patches of imaginary water—the celebrated mirage of the desert,—floating where no water could have existed, mocked our sight in this fantastic landscape."

From such hot cities and from the sun-baked plains every Englishman who can and many who must, if they would live, make a welcome summer change to the "hills"—modest name for altitudes doubling the height of any English mountain—on which health-stations have been established for each presidency. On the face of the Himalayas there is a line of such sanatoriums at a height of 5000 to 8000 feet, mostly within the bounds of small feudatory states. The chief ones are Darjiling, under 400 miles from Calcutta by rail; Naini Tal, with its lake, a refuge for officials of lowland provinces; Mussoori farther west, beside the military station of Landour; then beyond Simla, the Punjab's breathing-place, Murree, above Rawal Pindi. Simla is the *doyen* of these, as retreat of the

vice-regal court in summer, and this Brighton, Baden-Baden, Braemar of India has now grown into a collection of villas, chalets, hotels, and other buildings dotted for miles about its Mall, on fir-clad slopes where every level site has to be cut out, and the roads are mainly steep paths on which lazy Europeans get themselves carried up and down in hammocks or chair-litters, as their forefathers in sedans. A great deal of gaiety goes on here in the season, in spite of the mist and rain that make waterproofs a frequent wear. The scenery is described as being in spring not unlike that of the Scottish Highlands, with *khuds* of red earth for heather braes, deodars for firs, and flaming rhododendron-trees for rowans. Later on any such resemblance is drowned in a wealth of foliage and flowering, when one sees trees wreathed to the top with creepers and festooned with scented roses, red, white, and yellow; yet among strange blooms appear homely fern, moss, and brambles, the clematis and jessamine, the violets and windflowers that have such sweet memories to English exiles; and dahlias escaped from their gardens run wild here like weeds. The characteristic tree is the deodar, a cedar that in the forests behind Simla is found growing to a height of 200 feet, and measuring 30 or 40 feet round its gnarled stem. Pines also are common, and the dark Indian oak, beneath which the slopes clothe themselves with stunted lilac acacia, or after rain with a carpet of velvety-green. Glorious are the views—on one side over a maze of foot-hills to the great yellow plain vanishing in a haze of heat, on the other to the line of snowy cloud-wrapped peaks from which come the great Indian rivers.

Among the native cities of India a few may be sketched as representative. First in interest to men of every race is Delhi, seat of the Moguls, surrounded by ruins of more ancient cities and by famous monuments of art and devotion, on the edge of the Paniput plain where empire has more than once been lost and won. Our new official capital is to be erected some miles outside of the compact mass of buildings enclosed by a high red sandstone wall with heavy bastions and deep gates, in circuit over half a dozen miles. On the bank of the Jumna stands the Fort, an inner fortified citadel, which till the Mutiny was the emperor's residence. Tommy Atkins now tramps thoughtlessly by its two famous halls, the great cloister of red sandstone pillars where the Mogul sat enthroned before a mosaic of jewel work; while his dazzling Peacock Throne, that wonder of the eastern world, reputed as worth millions of pounds, stood in the smaller Divan whose marble walls, richly gilded, lacquered, and inlaid, display the proud inscription: "If on earth there be a paradise, it is this, it is this!" The beautiful Pearl Mosque of pure marble, and the sultanas' marble baths still remain to attest the short-lived magnificence of that fallen house. Over the centre of the city rises the Great Mosque, said to be the largest in the world, a domed and towered square of red sandstone and white marble upon an elevated platform reached by forty gigantic steps. Its chief beauty is in its gateways and arches; but since the Mutiny the great gate has been closed as a punishment, and the central quadrangle, giving room for a myriad congregation, lies open to the curious Englishman, whose profane shoes may tread its black and white chequered pavement, among the scowls of believers impotent to resent the conqueror's intrusion. Not far off the *Chandnee Chouk*, "Silver Street", makes the main thoroughfare running across Delhi, where east and west appear strangely jumbled in the shops that offer globe-trotters a gorgeous choice of souvenirs.

But the English visitor will first turn to a quarter beyond the walls, passing out by the Post-office and the site of that Arsenal, at the outbreak of the Mutiny defended by nine men against an army, for sultry hours, till they had no help but to blow it up and fly, only half of them living to wear the Victoria Crosses so well earned; then through the Cashmere Gate, at which another handful of brave men gave their lives to force open the road of the avengers. Across a mile of plain, now covered again with groves and gardens, is reached that low ridge on which, all through the heat and rains of summer, a few thousand pestilence-stricken men, themselves besieged rather than besiegers, encamped against Delhi,

Cashmere Gate, Delhi

Photo Johnson & Hoffmann

swarming with fanatical foes ten times their own number, but never gave ground till they had stormed their way over its walls and through its narrow crooked lanes—strain of heroic deeds commemorated by a tall red monument that from this height looks proudly down on the domes and minarets of the rebellious city.

A longer excursion is out by the Lahore Gate, past the spot where Hodson, so moved by bloodthirsty madness or strange fear, shot the princes of Delhi dead with his own hand; past that sumptuous mausoleum, a fortress as well as a tomb, whence, earlier in the day, backed by only a hundred troopers, he had dragged out the trembling fugitives from among thousands of men, who laid down their arms at the bidding of the haughty sahib, as if he had an army at his back; on over leagues of crumbling or buried ruins, and by countless tombs and shrines, to a group of Moslem arches and Hindoo colonnades, above which tapers into the air the Kutub Minar, king of towers, of which Mr. Val Prinsep, the artist, who did not so much admire the world-famed Taj, says—but not with the assent of all beholders: "Nowhere have I seen so perfect a work. Ring or belt after belt of delicate tracery, interwoven with texts of the Koran, rise to the height of 250 feet; while the whole is a beautiful reddish colour, slightly mottled, not by time but

intentionally." From this point there is a wide view over what another describer calls a million of acres of "green-and-brown chess-board, dead flat on every side", with the "sheeny ribbon of the Jumna" as its only natural feature.

More than 100 miles down the Jumna is Agra, also a favourite city of the Moguls. This, too, has its great mosque, and its palace citadel whose high red walls, a mile and a half in circuit, enclose another vast gathering of Arabian Nights' wonders mingled with the gimcrack trumpery of Oriental splendour and the practical signs of British rule—a bewildering labyrinth of gateways, galleries, pavilions, domes, towers, vaults, dungeons, barracks, arsenals, arcades, baths, fountains, gardens, and glittering divans, among them such architectural treasures as the Justice Hall of Akbar, the exquisite Pearl Mosque of alabaster-like marble veined with delicate tints—"all sapphire and snow"—and the Zenana Pavilion whose walls seem cut out of ivory.

From the balconies of this palace may be seen, on the river bank about a mile off, the Taj Mahal, so often extolled as the most lovely work of human hands. Some critics may shake their heads over the elaborate ornamentation that has fixed on those Mogul monument-makers the charge of having "built like Titans and finished like jewellers"; but such a mass of so noble material in that sunny scene could hardly fail to strike Fadladeen himself with admiration. Erected by Shah Jehan as a tomb for his favourite wife, in the seventeenth century, this "tender elegy in marble" is believed, in part at least, to have been the work of Italian or French architects in the emperor's service; and it is said to have employed 20,000 workmen for more than a score of years. It stands within a verdant flowery garden, itself a wonder under that scorching sky, traversed by a canal of crystal water and sparkling with fountains among thickets of dark foliage. Entering by a noble red gateway, one sees this blooming vista closed by the snowy splendours of the Taj, a pile of pure marble based upon marble terraces, crowned by a cluster of domes and flanked by graceful minarets, beyond which extend the wings of a mosque. The central dome, over the lofty doorway, is more than 200 feet high. Under this the walls of the mausoleum are lined with a lavishment of delicate mosaic workmanship and richest materials, flowers and birds represented in precious stones, which may well be compared to a "jewelled garden". Verses from the Koran also are inlaid within and without, the whole sacred volume, it is said, being inscribed on this stupendous building. After being dazzled by the magnificence of the exterior, one is awed by the "subtle shadow and chastened light" that reign within, where in the centre a screen of trellised stone, carved like delicate lace, encloses the dimly-lit tomb, or rather monument, for it is in a vault below that the emperor and his wife lie side by side. The story goes that he had designed to build for himself a similar monumental pile on the other side of the Jumna, to be joined to the Taj Mahal by a marble bridge; but this potentate, who could afford thus to mourn his wife at an expense of millions, came to be dethroned by his own son and cruelly confined in the citadel, where his only comfort was gazing upon his costly creation, which in this case indeed might be called "a sorrow's crown of sorrow".

It is by moonlight that the Taj reveals all its beauty to enchanted strangers. "In the warm sunlight", well says Miss Gordon Cumming, "it seems to cut clear and sharp against the blue, like a glittering iceberg. In the moonlight it is still dazzling, but seems as though newly buried beneath a deep fresh fall

of snow, lying lightly on domes and pavement and minarets, and rising above the tall cypresses and dark rich mass of foliage like some strange vision of purity. You can scarcely believe that it is real—you hold your breath lest you should awaken and find that the beautiful picture was but a dream."

A few miles off, at Secundra -a name that often in India preserves the memory of Alexander the Great,—is the tomb of Akbar, "grand and massive like his fort, a huge red pile of the same dark red sandstone", as the above-quoted author describes it, "built in four huge terraces narrowing as they ascend", to culminate in a mass of white marble domes, large enough to have lodged a regiment of horse, within which a gloomy vault enshrines the emperor's sarcophagus. A similar feast for sightseers is at Futteypore Sikri, more than 20 miles away, where ruin has been allowed to creep over the adjuncts of another magnificent palace and mosque of Akbar, which appear like a city crowning the height that here rises from the plain. Among its wonders is a court paved with black and white squares, on which, with living pieces, was played a game like chess; there are also signs of less edifying imperial diversions. This tolerant prince, among his wives, had a Christian lady, to whom may be due the Arabic text inscribed over one gateway: "Jesus has said the world is but a bridge over which you must pass, but must not linger to build your dwelling"—strange reflection among elaborate structures, profusely adorned within by all the costly arts of sculpture, inlaying, and colouring.

On the Jumna, between Agra and Delhi, adjoin each other the sacred Hindoo cities of Muttra and Bindrabund, which Miss Gordon Cumming describes as "crowded with fine specimens of native architecture, beautiful bathing-ghauts of red sandstone, and innumerable temples, both ancient and modern, of most intricate design. . . . Bindrabund owns one, especially beautiful, of white marble, with noble monolithic pillars and many statues, which are the favourite seats of the monkeys." But the most famed goal of Hindoo devotion is Benares, on the Ganges below its confluence with the Jumna, at once the Oxford and the Mecca of Hindostan, where, among colleges and the palaces of wealthy devotees, the sacred shrines are counted by hundreds, almost by thousands, most of them Brahmanical, but there are many mosques. Some Christian churches have planted themselves in the thick of the shrines of heathendom, and at least one Buddhist temple revives the memory of the faith that once rose here as from a grain of mustard seed to spread its branches over half Asia. A few miles without the city are the ruins of the Benares of Buddhist days, when it bore the same holy character; now it makes a crescent of 3 miles along the high bank of the Ganges, here broad as the Rhine at Cologne, its population of over 200,000, a tenth of them priests, swollen by the myriads of pilgrims who flock from all parts of India, trusting to deserve heaven by the very act of bathing in this most sacred reach of the sacred river; and still more sure seems the title of being burned on its banks, or choked to death by its mud, as fanatical relatives are said to do for a soul that seems slow to part with its body.

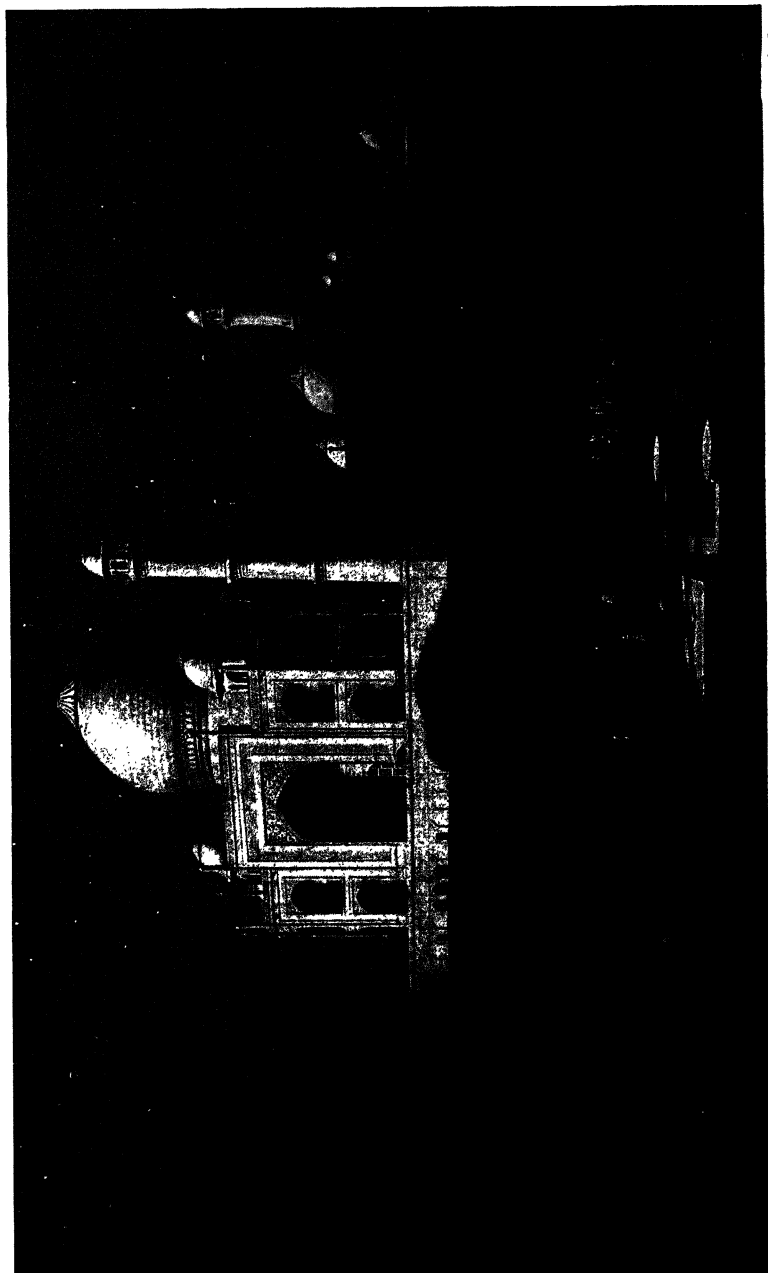
A strange spectacle to European eyes, nor altogether a pleasant experience for other senses, is presented by the narrow, crooked, lofty streets, or rather alleys, overhung by fantastically carved and painted shrines, almost bridged by balconies, awnings, and verandahs, the obscure passages below crowded by pilgrims of all classes, from gaily-attired princes with their swaggering hench-

THE TAJ MAHAL, AGRA

"The Taj Mahal, with its beautiful domes, 'a dream in marble', rises on the river bank. . . . It was erected as a mausoleum for the remains of Arjamand Benu Begam, wife of the Emperor Shah Jahan. . . . She died in 1629, and this building was set on foot soon after her death, though not completed till 1648. The materials were white marble from Jaipur, and red sandstone from Fatehpur Sikri. The complexity of its design and the delicate intricacy of the workmanship baffle description. The mausoleum stands on a raised marble platform, at each of whose corners rises a tall and slender minaret of graceful proportions and exquisite beauty. Beyond the platform stretch the two wings, one of which is itself a mosque of great architectural merit. In the centre of the whole design, the mausoleum occupies a square of 186 feet, with the angles deeply truncated, so as to form an unequal octagon. The main feature of this central pile is the great dome, which swells upward to nearly two-thirds of a sphere, and tapers at its extremity into a pointed spire, crowned by a crescent. Beneath it, an enclosure of marble trellis-work surrounds the tombs of the princess and her husband, the Emperor. Each corner of the mausoleum is covered by a similar though much smaller dome, erected on a pediment pierced with graceful Saracenic arches. . . In regard to colour and design, the interior of the Taj may rank first in the world for purely decorative workmanship."

—*The Imperial Gazetteer of India.*

Frith & Co.

(5)

THE TAJ-MAHAL, AGRA

men to repulsive fakirs clothed in dust and ashes, the way sometimes blocked by sacred kine, flower-garlanded and daubed with paint, that roam at will, the living idols of the place, not to speak of common beasts of burden. Through jostling obstruction, by the bazaar stalls loaded with that brass work for which Benares is famed, and by such tables of the money-changers as crowd the approach to an Eastern temple, amid a din of tom-toms, a babel of lowing, grunting, praying, and chattering, followed by a tail of the beggars who here swarm like flies, the critical tourist pushes his way, wonderingly to survey the spots that so work on human minds -the Golden Temple, the Monkey Temple, the Cow Temple, where his servant, hitherto a model of impassive respectfulness, suspected of being a Gallio to all creeds, may amaze him by suddenly tearing off shoes and head-dress and rushing forward to fling himself, in an uncontrollable rapture of devotion, before some foul fetish, while the master is glad to turn back, holding his nose and picking his steps among filth and garbage on the ground which millions worship. Thence, by high pavilions displaying crude paintings of tigers, griffins, elephant-headed gods and other monstrosities, he descends to the Ghauts, the terraced steps facing the river, where the sickening smoulder and crackle of burned corpses may soon drive him away from the lively sight of thousands of bathers fringing the muddy stream. A fine view over the city is to be had from the slender minarets of Aurangzebe's mosque that dominates Hindoo temples, as a mark of Moslem conquest. But the best way of seeing Benares is from a boat on the river, slowly passing before that panorama of devotion, so often described—"one unbroken bank of pinnacles, shrines, pillared mandirs, chaityas, pilgrim-houses, towers, sacred trees, images, altars, and flights of spacious steps", with a

Photo. T. B. Blow

Burning Ghaut, Benares

A body is seen floating on the water and near by the pyres of wood made ready

railway bridge now making incongruous intrusion on what has been called "the most Indian scene in India".

Our Government has not ventured to put down this "Holy Fair", over which sanitary authorities find much reason to shake their heads, for the concourse of pilgrims to the sacred slums of Benares is the means of carrying infection over India and fostering germs of cholera and smallpox that, as from Mecca, may travel to Western lands. Below Calcutta, at Pooree on the Orissa coast, is the renowned shrine of Juggernaut, properly Jagannath, a name very

The Car of Juggernaut. (From a photograph by Rev. T. R. Edwards)

familiar to us from exaggerated missionary reports. Here assemble some hundred thousand pilgrims at once, to tug at the car of a deity whose rites in truth would be held profaned by the shedding of a single drop of blood; and it is more than doubtful if any victim ever perished under its wheels unless by accident or suicidal insanity. Yet such are the conditions of so reckless a gathering in the rainy season, when devout multitudes, chiefly of women, are for days exposed without shelter, almost without food, among the filth of their ignorance and poverty, where cholera and fever greedily feed upon starvation, that the annual loss by death following this one festival is counted by thousands, sometimes by tens of thousands, an appalling sacrifice in honour of that Hindoo god who bears the title of "All Preserver".

Another great gathering-place is at Allahabad, of late losing its sanctity in native eyes, which seems a pity, since the spit of land where the Ganges and the Jumna join made a camping-ground from which the unwholesome leavings of the pilgrims would be washed away in the rains. Higher up, where the still bright stream of the Ganges pours down from the mountains, Hardwar,

sacred city of Krishna, holds a famous fair both of religion and business, visited in some years by half a million of people, or even more, a thousand of whom have been crushed to death, so eager was the press to reach its bathing-places. The Government now paternally regulates this mass of devotion so as to prevent such accidents. And here is the head of the great Ganges canal, that unsurpassed feat of engineering, at which those ignorant folk, if they knew their own blessings, might more gratefully worship than "in the long line of graceful pyramidal spires and domes with porches of pillars rising from hallowed courts". The priests do a thriving trade in bottling and sealing the holy water of the river to be sent all over India as a charm, an unction, and an elixir of life. Miss Gordon Cumming—the title of whose book, *In the Himalayas*, hardly denotes its merit as an excellent account of northern India—tells us of one pretty festival here, when at night the whole town is lit up by lamps, and the Ganges sparkles with floating oracles like the fireflies that spangle the air. "For still, as in the days of Lalla Rookh, the Hindoo maids or mothers launch a frail raft, a bamboo, a cocoa-nut, an earthenware jar, or some other tiny boat, wherein is placed a cluster of lamps. If these burn steadfastly till the boat floats out of sight, all goes well with the loved one. But should the little bark be caught by a sudden gust of wind, or engulfed in the darkness, then the shrinking woman with the sad gentle eyes believes that the blast of adversity will surely overcloud *his* future."

On the Gumti, which falls into the Ganges below Benares, in a rich country that has been called the Garden of India, stands Lucknow, capital of the ex-kingdom of Oudh, now, except the Nizam's Hyderabad, the largest native city in India, with a population of over 260,000, including an unusual proportion of Europeans and Eurasians. This loose gathering of hovels, palaces, and parks, stretched over a circuit of some score of miles, belongs to the later Moslem period, and most of its showy stuccoed structures ill bear examination, imposing as they appear from a distance. But amid them, on a slight eminence in the centre of the city, for a Briton the most moving sight in India should be that trimly-kept garden in which patches of blackened creeper-grown ruin are reverently preserved among clumps of gorgeous Eastern flowers and smooth lawns of turf, here a rarer show than flowers, where idle cannon stand as trophies by the battered walls, and brown-skinned gardeners water the ground once drenched with the blood of those who lie at rest around the white cross uplifted on a flowery mound, their proud and melancholy monument. For this is the Residency in which for five deadly months our hard-beset countrymen held out behind frail bulwarks, separated only by the breadth of a road from their myriads of fanatical foes, struck down one by one beneath the hourly storm of missiles and the silent pestilence, among them hundreds of women and children shuddering at the prospect of such a fate that loving husbands swore to shoot their wives dead if it came to the worst rather than let them fall into the hands of the butchers of Cawnpore. Nor was it white men only who there laid down their lives for England—

> "Thanks to the kindly dark faces who fought with us, faithful and few,
> Fought with the bravest among us, and drove them, and smote them, and slew,
> That ever upon the topmost roof our banner in India blew!"

Most of the gingerbread palaces of Lucknow, with their gimcrack adornment, are of little interest unless as scenes of that struggle—the central line of what was

once a narrow fortified street by which Havelock's Highlanders pressed on against fearful odds, "like a life-boat ploughing its way through a tempestuous sea to the rescue of some sinking ship"; the Bailey Gate, where now stands the monument of "Jock" Aitken, whose sepoys, true to their salt, defended it so well; the gorgeous royal dwellings that were the head-quarters of the mutineers; the fantastic suburban pile of the Martinière, from which Colin Campbell advanced for his less dramatic but more effective relief; the walled garden of the Secunder Bagh where, caught as in a trap, 2000 sepoys were fiercely slaughtered by the avengers of Cawnpore; the site of the Mess House, that last barrier between the

Ruins of the Residency, Lucknow. (From a photograph)

garrison and their heroic deliverers, in the assault of which Lord Roberts and Lord Wolseley were foremost; the Dilkoosha Park, where Havelock died on their glorious retreat; the Alum Bagh, where he was buried, and where his generous rival Outram maintained himself all the winter within two miles of the great city, till Lord Clyde led back the largest army we had ever mustered in India, to make a clean sweep of the rebel swarm.

Forty miles of fields and groves separate Lucknow from Cawnpore, a large modern town on the Ganges, noted chiefly for its cantonments and its leather work, but containing another British shrine, consecrated by unspeakable memories. Here, now, the emblems of Christian graces would speak peace to the souls of those whose bodies were flung into that well of horrors, which our kilted warriors reached too late, turning away in passionate tears and curses that were fearfully wreaked both on guilty and innocent. Here, too, the stolidest John Bull must feel a lump rising in his throat as he stands by the site of that poor entrenchment behind which the victims held out so long, or by the stairs where so many were treacherously betrayed to massacre, and the heathen temples saw their sacred river stained with English blood.

Among the most conspicuous structures of Benares is one of the observa-

tories, built here, as near Delhi and elsewhere, by an astronomical maharajah of Jeypore, in the beginning of the eighteenth century. The capital founded by him bears a unique character among Eastern cities, and the "Paris of India", as it is sometimes called, has become the chief place in Rajputana, much visited by tourists, as it is on the direct line from Bombay to Delhi. Within a high wall Jeypore is laid out in broad straight streets, crossing each other at right angles after the familiar pattern of American cities. The often elaborately ornate house fronts are uniformly coloured with a pink tint that, glowing in the sun, gives the

Street Scene, Jeypore. (From a photograph)

effect of rosy marble, against which fine touches of colour are made by flocks of sheeny pigeons, green parrots, and gorgeous peacocks, as much at home here as sparrows on a London road. These long lines of pink houses, shops, temples, palaces, and pavilions are lit by gas, and the well-paved streets swept clean by gangs of chained criminals. The main thoroughfare, running through the heart of the city, is a couple of miles long, and nearly 40 yards broad. In the centre rises the Maharajah's huge palace, making one-seventh part of the city, in which, among other wonders, are a magnificent marble hall of audience and the observatory of the learned founder, its instruments constructed of solid stone. There is one building, called "The Hall of the Winds", which Sir Edwin Arnold defies Aladdin's magician to match, "nine stories of rosy masonry and delicate overhanging balconies and latticed windows, soaring with tier after tier of fanciful architecture in a pyramidical form, a very mountain of airy and audacious beauty". Gardens have been laid out that aspire to be the finest in India. A den of man-eating tigers sentenced to lifelong imprisonment is one of the lions of the place, which also has a college, museum, schools, hospitals, alms-houses, and other institutions to show, presenting a rare union of Western and Eastern civilization. But all Oriental are the forts that frown down upon the city from

the stony heights around, on one slope of which the word WELCOME in gigantic white letters records the visit of King Edward VII to his vassal. The "Gumilcund" of a novel called *The Rajah's Heir* is evidently taken from this "magnified toy city".

A few miles out among these rugged hills are the ruins of Ambair, the old capital, that under a red sunset offers scenes for the pen of an E. A. Poe and the pencil of a Gustave Doré. Strangers who have obtained permission are slowly jolted up and down the ridge on one of the Maharajah's painted elephants, an Oriental experience that tunes the Western mind to the weird aspect presented by this deserted weed-grown city, in so striking contrast to its populous successor. Above a black, stagnant lake, haunted by snakes and crocodiles, the hillside is half covered by the lofty buildings and grounds of the palace, the top crowned by a fortress that makes a state prison and treasure-house. This palace, kept in good preservation, has the usual Indian combination of sumptuous magnificence and tinselled prettiness. The carved pillars of its great hall had to be covered up with plaster for fear of exciting the Mogul's jealousy. There is a temple here at which daily a goat or other animal is still offered to the goddess Kali, once only to be appeased by human flesh. Such a lingering rite seems in keeping with the situation and solitude of this silent mass of terraces, halls, courts, pavilions, cloisters, alcoves, and dimly-vaulted chambers, "made more gorgeously gloomy by their carving, gilding, and mirrors", that suggested to Bishop Heber the idea of an enchanted castle.

In the "Five Rivers" region is Lahore, another seat of the Moguls, who connected it with Agra by a long avenue, and decorated it also with a profusion of tombs and temples, "where Death seemed to share equal honours with Heaven". Fallen from its greatness for a time, it has now revived as the British capital of the Punjab, its new European quarter spreading it out for 6 or 7 miles, with a population that now exceeds 200,000. Here again we find among groves and gardens a citadel, a palace, a great mosque, a pearl mosque, and as a later feature the mausoleum of Runjeet Singh, that Sikh despot to whose dominion we succeeded; but along with these buildings are our flourishing university, schools of law, medicine, and art, an Oriental college, a cathedral, a Victoria Jubilee Hall, and a museum that boasts the best collection of Indian antiquities. Nor do such institutions seem so wholly exotic as they might do elsewhere, since in the Punjab, with its manly inhabitants and varied climate, we English more easily make ourselves at home.

A whole volume could easily be filled with the picturesque features of Indian cities; but this might seem a vain repetition of admiring epithets, and it is time to turn away from such a tempting theme. There is Gwalior (also called Laskar), its mass of temples dominated by a mighty rock fortress which bears the name of the Indian Gibraltar, but which in the Mutiny days was broken into by a couple of subalterns and a few sepoys. In the same central region there is Jhansi, with another old stronghold, whose Ranee, that heroic Amazon of the same struggle, was dubbed more of a man than any of the rebels among whom she fell fighting in a trooper's uniform. There is Oodeypore in Rajputana, renowned for its picturesque situation and its magnificent palace. There is Ahmedabad, capital of Gujerat, once the largest city in India, like so many others that have risen and fallen, and, like others, this preserves wonders of Hindoo and Moslem architecture. There is Surat, which can make the same boast of former greatness, but

has sunk to a tenth of its size since the days when it was one of our earliest settlements and our clerks and soldiers who died here were honoured with sumptuous if not beautiful tombs, to delude the natives into thinking the humblest of us a lordly hero. There is Bijapore, in the Deccan, the "Palmyra of India", whose remains of old magnificence still include the largest dome in the world. In the south of India, also, there are many marvellous cities, not so much visited as they deserve, because more out of the way of globe-trotting routes. Yet on the railway from Madras to Tinnevelli, near the point of the peninsula, lies a group

Photo. Bourne & Shepherd

The Siva Bull, Charmandi, Mysore

This gigantic figure is carved out of the solid rock, and is one of the largest of its kind in the peninsula. It is approached by a flight of 660 steps, by which worshippers ascend

of places which, as guide-books say, would well repay a visit, among them Madura[1], an ancient capital renovated by us round an Aladdin's palace, whose genius is said to have been a European; Trichinopoli— a name known in Europe through more than one of its wares,—beneath whose picturesque citadel Bishop Heber lies buried near the island on which stands one of the finest of heathen fanes; Tanjore, with the "sublime monstrosities" of its Hindoo pagodas. The whole of this region, where stone bulls and horses stand in the fields like calvaries in a Roman Catholic country, abounds in amazing temples, of characteristic pyramidical form, carved and coloured into a crust of lavish ornament that, beside our most elaborate cathedral fronts, would be as the blazing heaven of Hindostan to a temperate English sky. North and south, east and west, the richest native monuments of India testify ever to its preoccupation with a super-

[1] This was the seat of the cultured Pandyan dynasty, to which our King Alfred is believed to have sent an envoy.

natural life, while our buildings seem rather designed to make the best of "this warm, soft earth".

A comprehensive view of Indian architecture might prove too technical to be of general interest; but its main features may be briefly summed up. The earliest monuments, dating from before the Christian era, are the rounded topes, like an inverted bowl, of Buddhist adorers, and their elaborately-carved rock faces and excavations. The Jains also cut out temples in solid rock, enriching them with pillars and towers, and grouping them together on hill tops, as on Mount Aboo. The Hindoos were unacquainted with the true arch, but constructed arch-shaped openings by horizontal courses gradually projecting one above the other till they met. To cover large spaces they employed square piers with brackets projecting, one above the other in succession, from the capitals; and a dome was imitated by cutting off the angles of the ground plan, then successively reducing the angular space on the bracket principle. The characteristic of the Dravidian pagodas in southern India is the form of a storied and truncated pyramid; and elsewhere the towers and gables tend to a conical, or tapering shape, which becomes acutely pointed in the pagodas of Farther India. Where the Mohammedans came they modified Hindoo architecture by introduction of their domes, minarets, and the pointed or horse-shoe arch; and their hatred of images substituted for ornament in relief those flat surfaces inlaid with conventionalized designs, which so strongly contrast with the bold and often grotesque, not to say obscene, sculpture of the Hindoos. The open courts, airy pavilions, and shaded verandahs of domestic architecture were no doubt dictated by the climate, and not too fanciful seems an idea suggested to Mr. Andrew Wilson in wild altitudes beyond the sources of the Ganges. "Gigantic mural precipices, bastions, towers, castles, citadels, and spires rose up thousands of feet in height, mocking, in their immensity and grandeur, the puny efforts of human art, and yet presenting almost all the shapes and effects which our architecture has been able to devise; while, yet higher, the domes of pure white snow and glittering spires of ice far surpassed in perfection, as well as in immensity, all the Moslem musjids and minars. It was passing strange to find the inorganic world thus anticipating, on so gigantic a scale, some of the loftiest efforts of human art; and it is far from unlikely that the builders of the Taj and of the Pearl Mosque at Agra only embodied in marble a dream of the snows of the Himálaya or of the Hindú Kúsh."

PRODUCTIONS AND NATURAL RESOURCES

Under this head, again, variety marks the productions of a country that might be called a continent; or if there be a characteristic in its rank vegetation it is the tropical note of exuberant hugeness. On the mountains grow wildernesses of the timber belonging to successive zones, the most valuable being the teak and the sal wood, whose tough fibre well replaces our English oak. In the low country, too, there are patches of wild jungle, often filling up valleys or extending into great forests about the foot of the hills, sometimes thin and scrubby, sometimes close, dark, and tangled, almost always wanting in a certain indefinable sweetness that has made our woods the haunt of poets and lovers, as an English hedge in springtime has shy splendours to shame the purple

and yellow blooms of an Eastern garden. The cultivated plains are dotted with groves and spreading trees whose fruit is not more welcome than their shade. The most renowned of these is the Banyan, or Indian Fig, that throws down its branching cords to take fresh root till the original trunk becomes surrounded by a whole wood of countless offshoots, covering acres with the cool shade of laurel-like leaves among which an army can encamp thousands strong.

> "So like a temple did it seem that there
> A pious heart's first impulse would be prayer."

Twined among the banyan stems may be seen the lighter and more graceful leaves, whispering like a poplar's, of the Peepul, or Sacred Fig, that often shelters temples of the faith in whose legends it figures so prominently, or, smeared with red paint, itself makes a point of adoration for simple villagers. Our Public Works Department imitates the Moguls in shading the roads with leafy avenues, stretching for hundreds of miles. On the hot coasts especially, the foliage of palms gives its languidly drooping lines to the landscape. The southern slopes of the Himalayas are thickly clad with sturdy evergreens, the most noble of them the gnarled deodar, akin to the cedars of Lebanon. The holm oak is another inhabitant of the mountains. Farther down, the Chunar or Eastern plane makes a mass of grateful shade. Common are various acacias, with their slender foliage and gay show of blossom. The Neem-tree is cherished for the unpleasant smell of its branches and yellow berries, which act like our elder to drive away insects. Ebony, ironwood, sandal-wood and other choice kinds of timber are found in various situations. And king of the tribes of grass, that here in their slenderer form hide the creeping tiger and even the tall sides of the elephant, is the Bamboo, growing rankly all over India, in many parts of which it makes such a staff of life as the birch-tree was to a Canadian Red Indian.[1]

The forests, after long suffering from wastefulness, are now carefully managed by English officials, who in many parts have saved the country from becoming a desert for want of planting. Great care is taken not only to preserve the native growths, but to introduce foreign stocks that may flourish here, such as the Australian gum-tree. The most valuable exotic thus transplanted seems the Cinchona, once so jealously guarded in Peru, till Sir Clements Markham smuggled out shoots of it that on the Neilgherries and other Indian heights have given to the East a remedy so often needed in its feverish climates. Coffee is an older importation that thrives in the south, as tea on the northern hills of India; but these may be spoken of when we come to Ceylon, which cultivates both.

India is rich in fruits, the best known perhaps the mango, groves of which often offer grateful shade to man and a temptation to the easy morals of monkeys. Its luscious flavour is highly approved by some; but British palates may prefer the more homely sweetness of apples grown in the hills. A characteristic product of moist lowlands and seaboards are the cocoa-nuts that afford both

[1] Captain Lewin (*Wild Races of S. E. India*) tells us how a native "builds his house of the bamboo; he fertilizes his fields with its ashes; of its stem he makes vessels in which to carry water; with two bits of bamboo he can produce fire; its young shoots provide a dainty dinner-dish; and he weaves his sleeping-mat with fine slips thereof. The instruments with which his women weave their cotton are of bamboo. He makes drinking-cups of it, and his head at night rests on a bamboo pillow; his forts are built of it; he catches fish, makes baskets and stools, and thatches his house with the help of the bamboo. He smokes a pipe of bamboo. Finally, his funeral pile is lighted with bamboo. The hillman would die without bamboo, and the one thing he finds hardest to believe is that in other countries the bamboo does not grow, and that men live in ignorance of it."

meat and drink; the broad and bright-leaved plantain, too, supplies travellers with clusters of satisfying fruit akin to the banana. Various kinds of figs abound; so do dates, not of the best quality. There are oranges on some of the hills, and wild apricots in the Himalayas. Pine-apples are at home in such a natural hothouse, as are many fruits less familiar to us: limes, pomegranates, guavas, tamarinds, some of which begin to be seen in our markets, while others are known in the form of preserves. Sugar is made in India both from the cane and from palm juice, which ferments into an intoxicating drink that has sent its name, *toddy*, to take root in our own language; as it is said that *punch* also (Hindostani for five) stood godfather to a beverage composed of five "materials". The hotter parts of India are proverbially rich in pepper, ginger, cardamoms, capsicum-chillies, and other spices and condiment-plants, so much used in the national dish curry, which, as well as the chutney pickle, has been adopted in England.

Many kinds of vegetables make part of the people's diet, including various native gourds and vetches, and potatoes and cabbages, which we have introduced on suitable soil. As to the crops which are India's chief wealth, these mainly consist of different kinds of millet; next comes rice, grown chiefly on the moist river basins and coast lands, while wheat flourishes most in the north-west, and barley on the hills. Rice has long been exported, and of late years Indian wheat has disturbed the corn markets of Europe. Most of the farming is done on such a small scale, and with so little help of scientific agriculture, that there is room for improvement which would much increase the yield of Indian corn land; while the adhesiveness of the ryots, clinging to their ancestral holding of two or three acres, is the main obstacle to the cultivation of tracts still given up to nature or to the temporary clearings of half-civilized tribes.

Among other valuable crops a notable one is the poppy, grown chiefly in one district of Bengal, under Government superintendence, to supply by its juice the opium on which India makes such a high profit at the expense of the morals of Chinamen, a scandal loudly denounced by philanthropists. They in their zeal seem inclined to exaggerate the evil effects of this drug, that is used by Indian natives also, even by the vigorous Sikhs, and, taken in moderation, which few natives can afford to exceed, in their climate may not be more harmful than beer in ours; but here we open a nearer question of controversy. Indigo was another important staple, the cultivation of which is being rooted out by the use of chemical dye. Tobacco is largely grown, but for the most part of inferior quality, though in the south are made the strong Trichinopoli cheroots and other cigars which of late years have become more popular in England. Various oil seeds are an important crop where oil is so much used by the natives, both internally and externally as well as for lighting. It makes some Englishmen shudder to find that the castor-oil shrub is one of the prettiest plants in India, with its large leaves and branches of pear-shaped blossom that seem quite refreshing among coarser blooms.

Cotton has long been grown in India for local weaving, and it is largely exported, though its short staple makes it inferior to the best American cotton. Now cotton manufacture comes to be an important industry of Bombay, as about Calcutta is that of jute, the demand for which material, made up into sacks or otherwise, has brought no small gain to India as to Scotland. The Bombay cotton-mills, to a great extent in the hands of native millionaires, are at a

disadvantage in the expense of fuel and machinery, but can oppose Lancashire through the lowness of wages here, though these have gone up since such new enterprises offer employment to the swarming population. Silk weaving by steam, too, has been introduced into Bombay, while the material is chiefly produced in Bengal or imported from China; but efforts are being made to spread the cultivation of silk over India. Woollen-mills and paper-mills have been set up here and there, and we have shown the natives how to improve on their rude methods of crushing out oil and sugar; while, for our own wants, we establish breweries to undersell that "East India Ale" that was such an expensive luxury, and manufacture the ice that to us is almost a necessity of life.

Villagers with Opium, awaiting classification

Photo Bourne & Shepherd

Hand-loom weaving is a national industry of India; and some districts were long renowned for finer fabrics, such as muslin, which seem now to be dying out. For ordinary wear the native cloth of silk or cotton is not wholly supplanted by machine-made goods. Silk and cotton are a good deal woven together; both are often brocaded with gold and silver thread, and the native taste for glitter is gratified by spangles of metal or even of glass. More familiar to us in England than that *kincob*, tinselled stuff, become the carpets and rugs, so cheaply made in Indian jails. Thick and warm fabrics of camel's hair, also, have come into use in England. On the other hand, there seems to be a "slump" in one of the most famous of Indian manufactures, the shawls woven of delicate goat's hair in the Cashmere valley, at Rampur and elsewhere, with cheaper imitations of which the unwary tourist is apt to be taken in by smooth-tongued pedlars. Some of the real Cashmere shawls are made with not less than sixty shades of colour, arranged in artful patterns, a single one taking weeks or even years to

finish; and an elaborate specimen may cost a thousand pounds or more. Indeed Dr. Birdwood mentions one brilliant garment, made for the Guicowar of Baroda, which was worth a million, gems having been lavishly used in its embroidery. But the art of such sumptuous ornamentation of cloth turbans, velvet trappings, and so forth may be expected to die out, as native potentates lose the taste for "barbaric pearl and gold" and take more to copying the plain dress of their Western masters.

Among the artificers of India the gold and silver workers excel in patiently-skilful working with somewhat rude tools. With a handful of charcoal and a long blow-pipe for bellows, they show the ability of long practice, hampered by

Photo Bourne & Shepherd

Drying Silk Cocoons

respect for conventional ideas of art; but it is a question if they are likely to profit from Western models now set before them in place of those illustrated by their own chasing, embossing, enamelling, inlaying, and so forth. It is said that Hindoo gods are manufactured wholesale at Birmingham; but this statement may be apocryphal. The almost universal wear of bangles, anklets, and other ornaments by women, whose arms and legs rather than whose veiled face—but for its nose-ring, perhaps—seem their fortune, must alone keep this trade alive in India, as should the removal of restrictions on the importation of silver work into England, where some of the productions of Indian jewellers have long been known, the delicate gold chains of Trichinopoli, for instance. The brass and copper work for which Benares and other places are celebrated has ample encouragement in the domestic and religious customs of the people; and samples of this ware also find their way into England. The potter's art, too, flourishes on much practice, the native *chatties* being often beautifully coloured as well as gracefully shaped.

Silver is imported into India, but gold has long been obtained by washing, and is now crushed out of quartz by machinery, an enterprise attended with the usual uncertainty, as some shareholders in Indian mining companies are aware. Precious gems, which in times past were often to be acquired by summary methods of the strong hand, are still sought for here and there in gravelly soil; but in this kind of riches India is far outshone by South Africa. Among the hills abound many of the less costly stones, agates, cornelians, lapis lazuli, and so forth, used with such lavish profusion in buildings like the Taj.

With the baser minerals, that in the long-run prove truer riches, India is naturally well endowed; but in this case, unfortunately, the distribution of materials ill lends itself to production. There is a difficulty in bringing together

Photo. Bourne & Shepherd

Silver- and Copper-smiths hammering out Shapes

fuel, metal, and the stone necessary to form a flux, so that iron must still be smelted by native methods in such a small way as will not exhaust the local supply of charcoal. The large ironworks that have been established seem, as a rule, to depend on Government. There is a plentiful stock of coal, chiefly in the central part of the peninsula, but it gives too much ash to be good for manufacturing purposes. Stone and slate are quarried in the hills; some parts, notably the Deccan, have a useful building-material in the red laterite that, cut like cheese from its volcanic bed, hardens in the air and serves as the brick (*later*) from which it is named, not so hard but that a tin roof is found advisable to resist the deluge of the monsoon upon its native hills.

Salt, won from mines and quarries in the salt-hills of the north-west corner, or evaporated from shallow lagoons on the coast, makes a valuable monopoly of the Indian Government; its revenue from this source coming next to the land-tax, and, levied on such an indispensable commodity, causing the popular grievance such a tax has been felt in European countries. Saltpetre is largely exported. Among the peculiar natural products of India should be mentioned lac, the

secretion of an insect on resinous jungle trees, which supplies both a brilliant dye and the gum used for the lacquered work so common in Oriental ornamentation. Many other minor productions might be mentioned, some common to India with its tropical neighbours.

India already stands high among the markets of the world; and to extend her trade she needs mainly European capital and energy for the development of her manifold resources. By the establishment of new industries, by the teaching of improved methods, and by the encouragement of manufactures where the cost of plant can be balanced by the cheapness of labour, the Indian Government appears fully alive to its duty of providing for a population that, within half a century, has doubled under our rule. It makes a painful question whether one chief peril for this people be not the outcome of our well-intentioned protection. No longer decimated by internal wars, or left to perish without relief from recurrent plagues and famines, these helpless millions go on growing at a rate that threatens to press sorely on the means of subsistence. The main hindrance to progress seems to be an inert conservatism, generated by something in the climate and conditions of life, which here checks the development of human nature beyond a certain point. But even the unchanging East, whose sons for so many centuries have not perceptibly differed from what they were when the haughty Briton was a painted savage, may yet awaken from that lethargy in which

> "it let the legions thunder by
> And plunged in thought again".

Silent forces of change are now indeed at work, their effect as yet little visible, but it may be expected to increase with education and other solvent influences, more powerful than the violent catastrophes of the past. Knowledge, self-interest, contact with a race of such different ideals and energies, cannot, one believes, be in vain; and progress should be rapid once the natives come fully to recognize the essential justice of a rule, the most considerate and the best-intentioned of any ever established by foreign dominion, which seems now firmly established over the whole of the peninsula, while extending also beyond its natural boundaries.

ANIMAL LIFE

One of the cities often visited by English travellers is Baroda, a native capital noted for its Guicowar's new palace, for his gold and silver cannon, for his collection of diamonds, also for a familiarity with wild beasts that sets a tourist looking out for the local police. In spring-time some open space may disclose two or three *must* elephants, trumpeting fiercely, lashing their wrinkled hides with their trunks, and straining at the chains by which it seems well that they are bound to trees, else a mad bull would be a safer sight. In the streets he may meet a snake-charmer with his basket of serpents, a *shikarri* leading out a couple of hooded cheetahs for their evening exercise, or a lynx in a leash; but only barking dogs turn round to stare after such a pet. Baroda used to be celebrated for its wild-beast fights, a favourite amusement with Indian princes, whose palaces often contain a sort of enormous cockpit to serve as arena for encounters of tigers, elephants, rhinoceroses, buffaloes, and even rams, easily

trained to be bellicose. The present enlightened Guicowar may no longer encourage such spectacles; but he is himself a doughty hunter, and he keeps up a royal "Zoo", in which more than one of the caged tigers are—or a few years ago were—captures made by the English vice-principal of his college; and one of the finest used to be labelled as born in an English Zoological Garden, which seems a clear case of bringing coals to Newcastle.

Many readers think of India first as a home for wild beasts, and get their chief impressions of it from more or less authentic tales of *Shikar*. We have all heard of the Royal Bengal tiger, taking his name and fame from this corner of the world over which his humble relatives abound, down to the domestic pussy-cat. This is, indeed, the royal beast of India, that made a fitter emblem for its cruel despots than the lion. Hyder Ali and his son Tippoo, the tyrants of Mysore, used the tiger as their crest and its stripe as their livery. At the sack of Seringapatam, there was found among their treasures a grim toy in the shape of a life-sized tiger devouring an Englishman. It could be worked by machinery that gave forth sounds imitating the cries of the victim while he seemed to twist in agony between the beast's jaws. Tippoo kept real tigers as pets, dressed out in green and gold like coddled lapdogs, and trained to take sweetmeats from his hand; also he had tigers of business, to tear in pieces those that had roused his tyrannous displeasure, an office at other courts often discharged by the elephant.

By permission of Messrs. Harper and Bros.

Cheetah and Keeper

Most terrible of beasts is the tiger, whose stripes, in nature's mimicry, so easily blend with the bleached colours of his jungle home. Well might William Blake ask: "Did He who made the lamb make thee?" Beast as well as man go in dread of this neighbour. At his masterful roar the jungle is troubled; the monkeys fly to the tree-tops, chattering down abusive warnings; the birds twitter out their alarm; the deer take to wild flight; the jackal slinks away with a low whine as if recognizing a master in butchery. Trembling cattle and horses turn back from the very smell of such a foe: a horse has been known to rear in alarm at

the sight of a stuffed tiger; and the bravest man's heart beats fast before those malignant eyes, glowing green through the jungle darkness. Yet some animals prove a match for him, the elephant for one, and sometimes the buffalo. Herds of villagers' buffaloes are said to form square, as it were, against the attack of a tiger, turning outwards and repelling him with their horny bayonets. Cases of tiger-fights are reported in which a horse got the best of it with his hoofs, and a ram with its horns. Naturally the tiger prefers to prey upon less bellicose animals, such as deer and the humped breed of cows common all over India, treated with such reverence by all good Hindoos but not by this four-footed Siva-worshipper.

Now that zoological gardens and travelling menageries are so common in England, it may not be too much to say that the tiger is a more familiar sight to young John Bull than to most Hindoos. In his native wilds he is a creature of most retiring disposition, which, as a rule, may be safely depended on, unless accident bring him into society. There is a story of a tiger turning up at an Indian picnic party, but bounding away in alarm when a lady put up her umbrella as the only weapon at hand. Near Mahabaleshwar, a favourite picnicking spot is the brow of a black precipice, seamed with bands of white grass—the sheer rock said to be 3000 feet deep—at the top of which before breakfast one has seen a tree freshly scratched by a tiger's claws, but none of the party would be troubled by the likelihood of such a guest presenting himself in broad daylight. One Sunday evening, indeed, some of the Governor's band, taking a stroll along the shady avenues, came upon a tiger busy on his "kill", and that was a case for beating a hasty retreat. But when these woods were beaten by the Duke of Connaught, with a small army of beaters at command and all the help of local sportsmanship, it was not for weeks that he got the chance of a shot at a tiger. Captain Forsyth, doughty Nimrod as he was, has to tell us that, after ten years' experience of a very "tigerish" region, he has only thrice seen a tiger, unless when he was trying to find one. The tiger is quite as anxious to keep out of man's way as most men are not to go near him, and least of all does he leave his hiding-place when he has reason to suspect that enemies are looking for him. We must consider the extent and population of India in connection with the bill charged against this butcher, which in one recent year adds up to some 900 human lives, and a hundred times as many cattle. *Per contra*, every man's death seems to be avenged by a couple of tigers, so that the hunters on the whole get the best of it. The race of tiger-cats also do much mischief in India, especially leopards, which have a very sweet tooth for dogs, and often venture to snap them up from the outside of houses. In one way these are more dangerous, as more agile, than tigers, for a leopard or panther can follow its prey up a tree.

It might be expected that nobody had a good word to say for the tiger; but against his general bad name he finds an advocate in Mr. G. P. Sanderson, one of the best authorities on wild beasts in India, who is even inclined to hint at this one's being unduly persecuted. Some such ardent sportsmen talk as if game so worthy of their steel ought to be preserved, like foxes or pheasants, and hunted only after the rules of fair play. If sly and treacherous—and no wonder with such a character!—the tiger is at least economical, killing only for food, and making one sufficient victim serve him for three or four meals. Such, at least, appears the practice of a steady sensible tiger, but dissipated youngsters have been seen to strike right and left among a herd, as if for the mere pleasure of slaughter, and they are said to enjoy the sport of snapping up a monkey—when they can catch

one—by way of a snack Mr. Sanderson goes so far as to speak of the common or jungle tiger as "extremely inoffensive", nor without his services to man. He preys chiefly upon wild pigs and deer, which would otherwise do mischief in the fields. The fear of him is as good as a fence to keep cattle from straying too far from their village. If he may help himself to a cow now and then, it is usually an old useless beast which the religious Hindoo must not kill, and which only avails to spread disease among the herd.

A tiger does indeed become a nuisance when, perhaps grown fat and lazy, he learns that it is easier to pick up a livelihood by hanging about villages than by

By permission of the Editor of *The King and his Navy and Army*

A Dead Queen of the Jungle. (From a photograph

hunting the active inhabitants of the jungle. A still lower stage in his road to ruin is if, having overcome an instinctive distrust of his most helpless enemy, he has once tasted human blood and become confirmed in this unnatural taste by the ease by which it can be gratified; some say that the tiger takes to man-eating only when his joints are too stiff and his teeth too bad for other hunting. At all events, the "man-eater" soon becomes known as a plague to the neighbourhood he infests. The dread of him keeps men from their fields, women from the well; children need no threat of a bogey to pin them to their mother's apron-strings; houses are barricaded where such a hungry guest has been known to tear victims from their own hearths; spots haunted by so real an apparition are shunned; the villagers durst not stir forth unless in bands; and sometimes whole villages are deserted after repeated attacks of what may well be taken for a *Shaitan* in beastly shape. Sometimes, desperately maddened, the bravest men take an oath to avenge their losses, and seek out the monster in his lair, where he will sell his life dearly under

their poor weapons. But now, in most parts of India, there is seldom wanting some English officer or hard-worked official who asks for no better recreation than a chance of playing St. George to this dragon. The sahib is sent for; then the village may be at peace for years, when the man-eater's skin lies a trophy in some Bath or Bayswater drawing-room. Yet the deliverer may come not altogether welcome, with his train of swaggering attendants to rob and oppress in his name till the remedy seems almost a choice of two evils; nor do the timid peasants much enjoy being pressed into the service as beaters, by drumming, shouting, and squibbing to make the tiger break cover before the sahib's trusty rifle, or as guards to enclose it in a circle of fires till that champion appears on the scene.[1]

Mr. Sanderson, who ought to know, is inclined rather to belittle popular conceptions of the elephant's sagacity; but, even taking a large discount off the stories to this effect, one must respect Jumbo in his native land, where he makes himself at once so ornamental and useful. The chief reproach to be made against his intellect is the ease with which he lets himself be caught and tamed to the service of man. Though made so much at home on Indian plains, he is a wild highlander by birth. Over hilly forest regions elephants roam in huge herds, crashing their way through the thickets, lazily browsing on wild fruits and foliage, now and then holding a picnic on the cultivated border, from which they are scared away by the waving of torches, the blowing of horns, and the beating of tom-toms; and sometimes the exasperated villagers will lay down poison for these huge marauders as for rats. The tusks of the male make him a rich prize for sportsmen, not to speak of the exciting difficulty and danger of bagging such big game, so that Government has had to interfere for the protection of the elephant, to save him from the extermination that seems the fate of his African kinsmen.

Leaving sport among wild elephants out of sight, let us look at what may be called the civil life of this familiar beast, whose features are so well known in Europe also, his ungainly form, his heavy limbs, his loose-fitting hide, in the wrinkles of which flies give him so much trouble, his great ears and tusks, and the strong but delicate trunk which he can turn to so many purposes, from chastising a peccant brother to picking up a pin. He lives to a great age, over a hundred in many cases, so that there were elephants serving us in the

[1] Tiger-hunting may be divided into three kinds. The most exciting is when the noble sportsman meets his foe face to face; but woe to him if his bullet fail to kill or disable the wounded beast! A more practical method, despised by chivalrous hunters, is to lie in wait on a platform in a tree or some other safe place: native shikarris will even fortify themselves in a bamboo cage. This ambush is often fixed within shot of the beast's drinking-place or his "kill". The tiger, having a habit of regularity in meal-times, does its slaughtering upon any feasible occasion, then is pretty sure to return at sunset for supper off the carcass. Sometimes a kid or other animal will be tied up as live bait, nor do natives, with all their character for humanity, stick at putting a hook through this decoy's ear, and tugging at it with a string to make the poor creature squeak, as best means of getting a bite. It is only Mohammedans and very low-caste Hindoos who can take part in hunting; but often these shikarris, with very inferior weapons, show great courage as well as patience and cunning, well paid by the blood-money Government sets on a tiger's head. Trap, pit, poisoned arrow, any help seems fair against such a foe; and sometimes he is driven against nets, to be shot or speared from behind them. The third kind, favoured by Indian princes, who will offer a jungle battue to their honoured guests, is what may be called tiger-hunting in state, on the backs of elephants. A whole fleet of them, each equipped with a battery of deadly rifles, launches forth into the sea of trees and long grass, where perhaps the royal game has been marked down beforehand, sometimes enclosed for nights in a circle of fires, with men and elephants standing guard, and food provided for the destined victim as if he were an English pheasant. The tiger has small chance here, unless a too eager slayer gets the tables turned by being thrown under its jaws from the back of the elephant, which for its part enters into the sport with extraordinary zeal and sagacity, beating the thick cover like a hound, smelling out the scent, trumpeting forth the "find", pointing the retreat of the tiger with its trunk, with which, too, on command, it passes up stones to its driver that he may pelt out the coy game; and, when well trained to trust in its human burden, standing like a rock even though those desperate teeth and claws have fastened into its thick hide, and only if necessary taking a hand in the slaughter by its heavy foot or agile trunk.

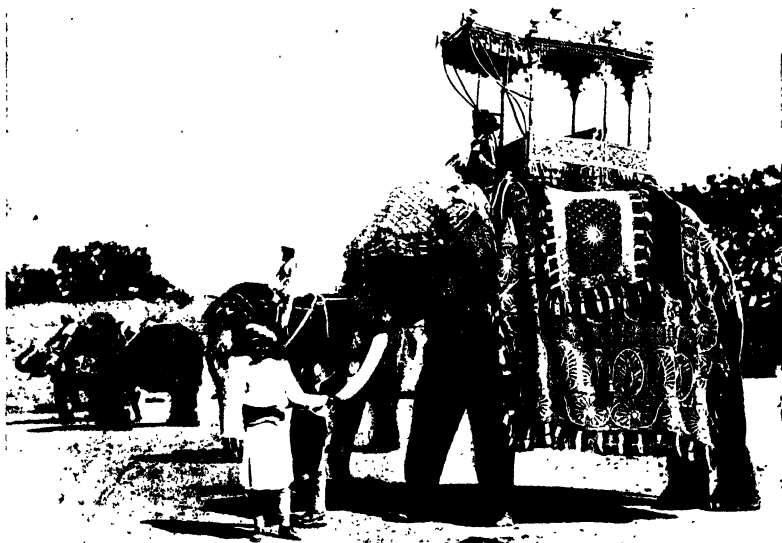
Mutiny who might have seen the whole career of our Indian conquest. He does not freely breed in captivity, but should be caught young, sometimes singly by digging a pit for him or slipping a noose round his leg, which he has a trick of idly swinging in the air; or he is basely beguiled by Delilahs of his own kind, amid whose blandishments this Samson of beasts finds the two-legged Philistines upon him with their ropes. Tamed elephants lend themselves readily to such treacherous work, even showing a certain zeal in it, as the harsh school prefect has been known to wreak on small boys the sufferings of his own juniorhood. In large numbers elephants are driven into a pound or *keddah*, such as is described for us by Masters Sandford and Merton's well-informed tutor; into this they follow their leader like sheep, and begin to suspect that there is something wrong too late to break through the strong enclosure.

One by one, with the help of the tame kidnappers, who use trunks and tusks freely in counselling submission, the wild ones are separated and tied up. At first the captured monster seems keenly to feel the loss of liberty, and may be seen weeping big tears as he tries in vain to break his unaccustomed bonds. But by and by he grows more resigned, takes a lesson of good behaviour from his tame brethren, is gradually reconciled to his lot, and, like a dog attaches himself to the human race that has the virtue of feeding him. The rest is a mere matter of time and training. The elephant often comes to show no small affection for his *mahout*, as well as fear for the sharp hook with which this master disciplines him. There are many stories representing their mutual affection, extending also to the mahout's family, like that between a dog and his owner.

The general rule of contented docility must be qualified by exceptions. The most steady and industrious of elephants may prove liable to sulky fits and unexpected outbursts of temper. They have been known to run away after years of captivity, often coming back of their own accord when they find it hard to pick up a living in freedom. The males become subject to periodic sexual excitement, in which they are dangerous to deal with: this state is called *must*. Sometimes an elephant goes mad outright. It is not clearly ascertained what makes a *rogue* elephant, that wanders off, sour and solitary, from a wild herd. Whether out of his wits, or outlawed from his fellows, or disappointed in love, or with some crime on his conscience, the rogue elephant may prove more formidable than a lion or a man-eating tiger if he take to haunting a district and butchering its terrorized inhabitants without provocation, as sometimes happens. In days of elephants playing a part in battle they might prove dangerous allies, when, seized by a panic, they turned tail to trample down their own army. Firearms were a blow to the elephant's prowess as a warrior, the trunk being a tender point where he can be painfully wounded, as the Romans found. Those of us who have seen our Jumbos meekly, not to say sleepily, letting themselves be petted and fed, would be startled by the vehement motions and angry trumpeting of the elephant when roused to passion.

Manifold are the uses to which the elephant is put in India. He is most useful as a beast of burden, where, with half a ton on his back, he can force his own road through rank jungles, picking his steps on doubtful ground, trying the strength of bridges before trusting himself on them, climbing steep hills, or sliding down slippery slopes by carefully-chosen zigzags. With his trunk and forehead he can lift or push a gun out of a quagmire; and will scream in indignant rebuke at the sulky bullocks that do not second his efforts by pulling

at the right moment. In raising weights he shows wonderful capacity for bringing his huge strength to bear. He will gather his own fodder, handing up sheaves of grass to be stacked on his back. He will uproot trees one by one as ordered, and pile them on each other. His business-like qualities are perhaps best displayed in the teak-yards, where huge logs are stacked by elephant labour with extraordinary neatness, and, if a beam prove too heavy for one to deal with, his mate turns aside to lend him a trunk.

For a native to keep an elephant is much like setting up a coach and four with an English gentleman; only very well-to-do families can take the air on

State Elephants (From a photograph)

their own elephant. Such ostentation indeed comes expensive. A fine one may cost a thousand pounds or more; and *caveat emptor* must be the buyer's rule, since elephant dealing seems to be as demoralizing as horse dealing. Then, even where food is so cheap, it costs a good deal to keep the big beast supplied with his daily mountain of fodder, grass, sugar-cane, or what not, besides occasional treats of fruit, sweets, and spice by way of reward, and the giant doses of medicine he is understood to need pretty often. It takes two men to look after him. The proverbial phrase, "a white elephant", is said to come from a way Indian princes had of sending an elephant to a subject, who was thus politely sentenced to be eaten out of house and home. Moreover, a magnate's elephant should be magnificently equipped, not only with sumptuous caparisons on occasions of state, and a gilded howdah topped by gorgeous canopies, but with a coat of paint in elaborate designs, which may take a day or two to lay on, and is apt to be spoiled by the elephant's habit of throwing water or dust over his

head, and beating it with a bush or a wisp of straw, held in his trunk, to drive away the flies. Solomon in all his glory might well have been outshone by a rajah on his elephant of state, this being a natural point of pride with Indian princes. For ordinary locomotion elephants are still used in the districts, but in large cities it has been found necessary to forbid or regulate their passage, like that of traction engines, since the sight and smell of them, as of the camel, prove very disquieting to horses. In the north-west chiefly, the camel supplants the elephant both as a fleet steed and a beast of heavy burden; in some parts he is harnessed to vehicles, and even put to plough, like the patient bullock that is so hard worked all over India; but if recommended by his hardy endurance, the "'oont" has a bad name for temper and other unsociable weaknesses. Mules are said to be gaining favour among the four-footed carriers in our army service; and we learn Mr. Atkins' opinion of their respective merits:

> "The 'orse 'e knows above a bit, the bullock's but a fool,
> The elephant's a gentleman, the baggage mule's a mule;
> But the commissariat cam-u-el, when all is said and done,
> 'E's a devil an' a ostrich an' a orphan child in one".

Were the kingdom of beasts a republic, the elephant has surely the best claim to be elected president. That titular king, the lion, has abdicated his sway in India, though he lingers, in a maneless state, on the borders of Gujerat. The rhinoceros, too, is driven back to wild borders. Black bears are common among the hills, and the snow-bear in the Himalayas, where men may sometimes be seen with half their faces torn away by Bruin's claws. There are wild buffaloes in the forests as well as tame ones in the fields. The wild boar that, when pressed, can be as fierce as any tiger, takes the place of the fox in the favourite sport of English horsemen. Reynard in person is not a stranger in India, but wants the sacred caste he bears in England, though here and there packs of foxhounds are kept up. Some of our ideas of the fox as type of cunning seem to be derived, through ancient folk-lore, from the shy and sly jackal, here looked on as hardly worth hunting; but it may often be seen slinking off into cover, and still more often is heard at night raising that dismal howl interpreted *I smell- a—dead—Hindoo!* to which the rest of the pack give back in sleep-banishing chorus, *Where—where—where?* Wolves are more fierce; a Government report credits them with killing 338 persons in a year. Various kinds of deer and antelope abound, and it is well known how the natives train cheetahs to spring upon such lively game when unhooded like falcons and slipped like greyhounds. This creature is a kind of leopard, with some hint of the dog. The dog itself, as all over the East, is not held in such honour as with us, being usually a lean, dirty, sneaking, masterless cur, treated with fine scorn by the high-caste companion of the English sahib, through which, however, some improvement may be looked for in the breed and status of the Indian pariah that calls itself a dog and a brother. By the way, Mr. Sanderson emphatically declares the British bull-dog a braver beast than any born in India.

Falconry is a favourite native sport. Otters, cormorants, and pelicans are trained to fish in the service of man. Other birds serve him as volunteer scavengers kites, vultures, and the long-legged cranes nicknamed "adjutants", whose six-foot-high antics so much impress new-comers. Beautifully-plumaged birds abound, gorgeous peacocks running wild, iridescent pigeons, noisy green

parroquets, blue jays, and many more, protected by Hindoo reverence. The natives, however, are fond of caged song-birds. Fowls and ducks, turkeys and geese, partridges and quails are natives of the East. The sparrow makes himself still more free and easy in India than in England; though here, where everything is on a bigger scale and of intenser tint, his part seems taken by the impudent and ubiquitous Indian crow. Here, too, are other birds familiar to us, as well as many foreigners like the sweet-voiced bulbul, the crested hoopoo, and the brilliant little sun-bird. The woods swarm with prettily-striped squirrels and gracefully gambolling lizards, as with thievish monkeys which presume on their sacred character to steal shamelessly. In the middle of field or garden rises the little platform on which the native "crow boy" sits all day to scare away those leaping and flying poachers. Not the least destructive are the "flying-foxes", a kind of huge bat, that gather upon the trees in such thick clusters a shortsighted stranger might take them for the fruit they pillage.

Cobra Scholastic Photo Co.

Far more formidable in India than all fourfooted beasts of prey are the reptiles, from the hooded cobra, perhaps as long as a man, to a grass-lurking snake, no larger than an adder, that is death to so many barefooted natives. Where the tiger yearly slays his hundreds, the serpent his thousands. In spite of rewards offered for the extermination of deadly snakes, in most parts the death-rate from this cause is said to increase, perhaps as being more accurately reported. In Bengal, for example, against 41,000 snakes killed in a year, must be put down more than 10,000 human victims. Another report puts the whole annual mortality from this cause, in India, at nearly 25,000. Not only the superstition of the natives has to be combated, leading them to venerate and cherish these loathsome destroyers, but the cunning that tempts them actually to breed snakes for the sake of the reward. One has heard of an official, who had spent all the annual sum granted him for this purpose, having a basket full of venomous creatures turned out into his compound by a disappointed speculator. To Europeans, with their strong boots, the smaller snakes are far less dangerous; yet a sahib going out at night is not ashamed to be piloted by a half-naked native carrying a torch or lantern to clear the way. Any thorny thicket or fence, any dark corner, the roof of one's house, or even one's pillow,

may shelter a cobra; and many are the exciting stories told of narrow escapes in English homes, while the poor Hindoo runs daily risk of what he takes for an inevitable fate, and his innate conservatism resents the clearing off of scrub and jungle which harbour such an enemy close to his door. The huge python, that crushes its victim for leisurely deglutition, has at least the good taste to keep itself more out of the way of human life.

Crocodiles are kept in tanks, sometimes cherished as sacred, but they too will here and there snap up a victim. As the tortoise abounds in the Jumna, so the crocodile in the Ganges; and in the coast lagoons they offer themselves

Snake Charmers

as an imposing quarry for our sportsmen. Smaller members of the lizard tribe make themselves much at home everywhere. In the Bombay Natural History Museum cobras are seen occupying the same glass cases with chameleons, that either have established some *modus vivendi* with their irritable neighbours, or actually find a cloak of darkness in their wonderful capacity for at once taking the colour of the branch or other surface on which they lie. Nervous visitors are apt to be startled at the apparently careless way in which the officials will lay hands on those reptiles, bringing them out for gruesome exhibition. Most wonderful, of course, are the tricks of the snake charmers, who, it appears, pretend to a mastery that has more of practice than of magic in it, and some times pay with their lives for too confident familiarity. Their performances must be classed with the really marvellous feats of Indian jugglery, which have so often supplied matter for travellers' tales.

The mongoose is a gray ichneumon often kept tame in Indian houses, like our domestic pussy, for his services in killing snakes as well as rats and mice. Rats count as a common nuisance, especially the huge species known as bandicoots. One of the first things an Englishman learns in India is to shake out

clothes, slippers, and sponge in case of their concealing a venomous scorpion, which finds itself much attracted to his bath-room, as do hideous bloated spiders and similar pests. More ruinous visitors are the white ants, that, once they troop into a house, will make a skeleton of boots, books, woodwork, and everything not armoured against them. To keep off these omnivorous creatures, as well as armies of red ants and black ants, floors may be washed with corrosive sublimate, boxes placed upon bottles, and the feet of bedsteads and larders on small sheets of copper or in tins of water. That amusing book *Tribes on my Frontier*, by "E.H.A.", puts a humorous face on troubles only too familiar to Indian housekeepers.

Gay butterflies, glittering beetles, and sparkling fireflies are the rajahs of an insect world containing many low castes. One must visit any hot country to know what is meant by a plague of flies. Flitting and scuttling life here gives more annoyance than the fear of wild beasts. Macbeth's conscience were hardly more murderous to sleep than the noises that beset a virtuous man ensconced beneath muslin curtains, a far from impregnable defence against the winged and stinged foes buzzing about him in hundreds, with a light burning all night to scare away the plague of creeping, crawling, and prowling creatures that haunt his dwelling. No sooner does he think all still about him than there tunes up an unwelcome concert of noise--howls from the jungle, croaks from the swamp, rustlings of huge wings in the branches about the house, the rattling of bones dropped on the roof by birds of prey, patterings and scratchings from every wall; the very furniture alive with chirpings and cracklings; squeakings and creakings inside and outside; a feverish dread of skipping and hovering things felt rather than seen to be about one's bed; and through all, the steady hum of the tiny busy mosquito athirst for human blood. One hardly cares to get up in the dark for fear of setting foot on some scuttling cockroach or huge spider, or even deadly snake. Every alarm is magnified by heated imagination. The clamour of the jackals over a carcass suggests a band of hungry wolves. A mongoose having it out with a rat beneath the floor is like an animal Armageddon. Does your faithful dog growl in the verandah, you make sure a leopard is about to pounce upon him. A restless horse seems to be trampling like a *must* elephant. And perhaps over all comes the roar of the tiger, nothing indeed to be afraid of, as he would go silent enough if attending to his bad business. Such are the torments of a sweltering Indian night, that give an Englishman cause to "thank the goodness and the grace" that made his birthplace in a land where a caterwauling puss or a scratching mouse would be the worst of nocturnal bugbears.

[1] The census of 1911 makes the population of India (including Burma) some 315 millions, an increase of about 20 millions in a decade.

CEYLON

Like the Indian mainland, from which it is separated by Palk's Strait, this pear-shaped island, about 600 miles round, has two different regions. The north part is a plain of coral formation, fringed by lagoons and sand dunes, where rich palm-groves form a border for rice-fields and gardens. In the south a mountain mass is covered with exuberant jungle, through which pour the innumerable streams that water this fertile soil, the longest of them about 130 miles, all alternating between dwindled water-courses and torrents swollen by heavy rainfall. The highest point is Pedrutallagalla (8296 feet), but the most conspicuous and famous the cone called Adam's Peak (7420), time-honoured seat of rival faiths, haunted by brilliant visions of the same cloudy origin as the Brocken spectre, its top crowned with Buddhist and Mohammedan temples, where pilgrims of both creeds crowd yearly to gaze on a hollow in the rock, taken by one set of devotees as the spot whence Buddha ascended to his heaven, by the other as Adam's first footprint after being driven out of paradise. Legend also gives the name of Adam's Bridge to the narrow reef of coral and sandbanks that blocks up the strait against all but small vessels, and may some day effectually join the island to India. With the Malay Archipelago it is allied by a tropical luxuriance of vegetation which, to Southern imaginations, made Ceylon a natural site for Paradise.

Politically as well as physically its connection with India is interrupted. After being dominated successively by the Portuguese and the Dutch, supplanting a wilderness of native tyranny, it became a British possession in 1815, but holds a separate position as a Crown colony, ruled by a governor and councils, through a civil service of its own. Ethnographically the connection is more complete. The aborigines, chiefly represented by the stunted and dwindling Veddah race, were replaced by the Cinghalese, a Hindoo stock broken off the parent stem so long ago as the days of Buddhism, which still remains their religion. These make two-thirds of the population, rather over four millions, of whom a few thousands are European residents. But the languid Cinghalese are in turn being elbowed out by more active Tamil immigrants, who come in increasing numbers from the opposite coast, bringing with them their modern Hindooism in religion. There are some 200,000 Arab and Malay Islamites, and over 20,000 Eurasian half-castes of Dutch and Portuguese blood, along with whom about a tenth of the inhabitants count as Roman Catholic or other Christians. The currency is rupees, their value now fixed, as in India, at 1*s.* 4*d.*, but here decimally divided into cents.

The climate of an island a few degrees above the Equator by no means suggests paradise to one arriving on the low coast from more bracing northern

climes. It is equably hot, damp, and oppressive, tempered only by sea-breezes and by heavy rain-storms. By going up the hills, however, one can find a delightful summer temperature, notably on the plateau of Nuwara Eliya (6000 feet), the Simla of Ceylon, where greatcoats and fires come in not amiss. By some official perversity, it would appear, we have fixed our capital at Colombo on the west side, where the heat is at its sultriest and muggiest, and where the harbour is not naturally good, whereas Point de Galle on the south, and Trincomali on the east, have better air and older harbours; in the former case, however, too much exposed to the south-west monsoon. Galle was long the chief place on the island, and Trincomali used to be our naval station; but the many mail steamers

Photo. F. B. Blow

Outrigger Canoes, Ceylon

that now call at Colombo's break-watered port, make this a Crewe Junction or Oban of the East, with a growing population of over 210,000.

Most Eastern are the sights that meet the stranger here, beginning with the strange canoe in which he may land, a hollowed palm trunk, its narrow beam balanced by long bamboo outriggers with a buoyant log lashed to the end of them, on which a boatman squats to keep it steady in high wind. The black Tamil boatmen do not much disguise the human form, in their case finely developed; but the slender brown Cinghalese, with their white petticoats, and hair fastened into a knot by a tortoiseshell comb, are apt to be taken for women, while their women appear more like men. In a motley mingling of these with Chinese, Arabs, Jews, Parsees, Malays, conspicuous are white-dressed Britons, trying to keep cool; and not less conspicuous the Buddhist priests in their yellow robes with yellow umbrellas held over their heads by obeisant acolytes. One soon feels the need of an umbrella in these white streets, shaded by avenues of tulip-trees lavishly shedding their clusters of red and yellow blossom; and a stranger will wait the fiery sun's decline to make acquaintance with the lions of Colombo: the old Dutch fort, the original European quarter, the shops of

Chatham Street, the Governor's roomy palace, the green esplanade, which answers here to Rotten Row, and the bungalows of Cinnamon Gardens that are the "West end" of this town. Even the native mud huts show half-hidden in blossoming gardens that on the outskirts merge into palm-groves, and these into the tropical forest. "Often", says Professor Hæckel, "I have believed myself in some beautiful solitude, with tall trees on all sides, festooned and overgrown with creepers; but a hut hidden beneath a bread-fruit tree, a dog or a pig trotting out of the bush, children playing hide-and-seek under the caladium leaves, have shown me that I was in a native garden. And, again, the true forest close at hand, with its mingled species of the most various tropical trees, with its orchids, cloves, lilies, mallows, and other brightly-flowering plants, is so full of manifold beauty that one might easily fancy this a fair garden."

As so famous a naturalist has every right to tell us, the palm is the prevailing tree, both in village and country—the feathery cocoa-nut with a crown of huge leaves bending down its slender white trunk; the palmyra or fan-palm, a stout, straight, and black trunk with a stiff semicircular sheaf of foliage; the elegant reed-like areca-palm; the sugar-palm, whose tuft recalls a huge maiden-hair fern; the talipot-palm, tallest of all, its mast-like stem often over 100 feet high, bearing once in its lifetime a gigantic spike of white flower that bursts forth with an audible explosion; the pandang, here called the screw-pine, but properly a palm, branched like a candelabrum, each branch ending with a thick bunch of sword-shaped leaves, that seem closely screwed in, guarding a treasure of white blossom, while slender snake-like roots fork out downwards, to give the tree an appearance of standing above the ground on stilts. The true pine is absent from the flora of Ceylon, which can well miss one member among vegetable giants so huge that the huts formed of their leaves and branches look like toy villages nestling beneath them. On the estuaries and lagoons are ungainly mangrove woods, with their roots sprawling over the slime. The banyan-tree extends its "Gothic vault" as on Indian plains. The india-rubber tree, which we know as a potted shrub, here shades an area large as a mansion, and makes a larger circle of snake-like roots twining into dark labyrinths where a troop of children can play in and out. Bamboos grow bunched in sheaves, clinging together for 100 feet, then spreading out an umbrella of foliage that in the most prolific season will be raised a foot in a day. In the mountains of Ceylon, as on the Himalayan slopes, the most striking tree is the giant rhododendron with its masses of red flowers. Among the thick forests are hidden ebony, rose-wood, sandal-wood, and other valuable timber, which are to common trees what gems are among common stones. And everywhere these kings and queens of the vegetable world must submit to be laced together and twined about by creepers, perhaps a foot thick, and loaded with a crowd of parasite blooms choking one another in their race upwards towards the light from the dank ground buried beneath deep brushwood and fern, which in a temperate climate would rank as thickets. Such are the prodigal charms that have excited the enthusiasm of naturalists like Hæckel and poets like Sir Edwin Arnold.

The latter, in his *India Revisited*, is most emphatic, declaring it "impossible to exaggerate the natural beauty of Ceylon. Belted with a double girdle of golden sands and waving palms, the interior is one vast green garden of nature, deliciously disposed into plain and highland, valley and peak, where almost everything grows known to the tropical world, under a sky glowing with an

equatorial sun, yet tempered by the cool sea-winds. Colombo itself, outside the actual town, is a perfect labyrinth of shady bowers and flowery lakes and streams. . . . Leaving the coast you travel at first through interminable groves of palms, between which lie sodden but fruitful flats, rice-grounds and jungly swamp, steaming and teeming with life. It is all one hot-bed of boundless propagation. Every corner where water lodges or sun-rays fall is seen choked with struggling stems, furious to live and blossom and bear seed. Then as the train mounts amid splendid highland scenery, the hillsides and deep valleys display the same fertility. Your carriage rolls at the bottom of one immense precipice of ferns and palms, and hangs over another clothed for 1000 feet down with this same endless garment of verdure. . . . It is on every side a huge tangled tyranny of the floral world, where man is in positive danger from the very plants that feed and shade him." This author's son, Mr. E. L. Arnold, *chassant de race*, describes the view from Sensation Rock, where by a triumph of engineering the line is carried along a narrow edge "with 200 feet of towering precipice above us, and below nothing but sheer crag and air"; then underneath "the green and brown paddy fields were like squares on a chess-board, and the men and oxen ploughing no bigger than the smallest dots, while here and there, in the centre of dark-green patches of palms and bananas, were little Indian villages looking like brown smudges on the wide plain".

The picturesque line on which such views come takes one up to Kandy, the native capital and summer retreat of our Government. At this small place, standing high among wooded hills, adorned by lakes and gardens, are the palace of the old kings and the famous temple, a pagoda-like building adorned with fresco paintings of the torments awaiting unbelievers, among which a piece of ivory is reverently treasured as Buddha's tooth, kept in six jewelled shrines, one within the other, to be carried in solemn procession once a year, else rarely shown to curiosity or adoration. Other Buddhist pagodas are embowered among trees knit together by gay creepers into clumps of bloom. But for Professor Hæckel the chief goal of pilgrimage was the Botanic Garden of Peradenia, in the outskirts, where is collected such a bouquet of choice flora as a French traveller can compare to nothing "but the paradise of some Eastern tale, designed and inhabited by invisible genii".

Another fine railway trip from Colombo is along the windings of the coast southwards, bordered by luxuriant solitudes where steam seems a strange intruder; and a new line is opening out the north of the island, which globe-trotters may now survey at their ease without any fear of wild beasts. As Sir E. Arnold points out, this natural wilderness of greenery is almost too thick for animal life. Its woods are not so well populated as those of India. Birds seem rarer, crows and sparrows most visible, though sometimes through the forest shades flash peacocks, parrots, radiant jungle-cocks, and humming-birds, as in the sunshine flit dragon-flies, moths, and beetles, replaced at night by glittering clusters of fireflies—and mosquitoes. Blue and green king-fishers on the streams, flocks of red and green parrots, and now and then the Ceylon bird-of-paradise with its long white tail-feathers, contrast with the ugly flying-foxes huddled together on fruit-trees. The jungles harbour bears, monkeys, deer, and snakes; but what the traveller has usually most to fear here is the thin tiny leeches that insinuate themselves under boot and gaiter, to make red cherry blobs of themselves at the expense of his blood. Worms thrive in the

damp ground so as to grow almost a man's length. The name Ceylon means "lion island", but there are no lions now, unless on the British ensigns. The tiger has the kindness to keep himself away; so has the wolf. The interior once swarmed with elephants, tuskless and of a smaller breed than the Indian; but these have been largely exported to the mainland, valued there for their docility, and now they are so much thinned out that sportsmen may no longer shoot them without a license. The very oldest inhabitant seems to be a huge tortoise, said to have belonged to a Dutch governor two centuries ago.

Under our government the population has considerably increased; but once it was ten times greater, to judge by the desolate ruins of temples and cities now

Photo. Skeen & Co.

The Lake of Kandy, Ceylon

buried among the jungles. On such a fertile soil, under such a forcing sun, life is easy. Rice makes a great part of the people's food, grown in "paddy swamps", where between mud banks, several feet high, that serve as paths, the flooded fields are ploughed, or rather churned into sloughs, from which the green rice-stalks soon shoot up, giving cover for snipe, plovers, and for the white herons called "paddy birds". Cocoa-nuts make a valuable crop, if only for the oil extracted, and the coir made from its husks. One who knows but the dry cocoa-nut "of commerce" can hardly appreciate the merit of the fresh fruit, a lump of rough, green fibre, sometimes as big as a football, from which the top is knocked off to get at a draught of the cool juice—"milk", as we call the more fluid part of that buttery inside, that will be harder than cheese before it reaches England. The bread-fruit is another great, green ball, weighing a stone or more, which we shall often meet in tropical climates, as well as the jack-fruit

of the same class, still larger, but not so palatable or nutritious. Ceylon has several varieties of plantains or bananas, their fruit here called "Figs of Paradise", growing in huge bunches, also pine-apples, mangoes, custard-apples, and others, cultivated with little trouble. English fruit-trees have been introduced, but ran too luxuriantly to leaf in this climate. The starchy roots of the yam replace potatoes. Fish are caught in abundance on the coast, prawns and such-like being specially in favour for the national dish of curry, which makes the chief seasoning of rice. All these are so cheap that a lazy Cinghalese can live without working for more than the price of a pint of beer daily.

Cinnamon was formerly the chief product for exportation, and made a valuable Government monopoly; but this has largely given way to other staples. A recently developed resource is rubber, that here shows promise of prosperity. The hillsides of Ceylon made excellent ground for coffee-planting, when cleared by fire, or by cutting down a swathe of thickly-entangled forest, the weight of which uprooted the trees below and carried an avalanche of timber into the valley. For a time coffee-growing proved most successful, till the plantations were attacked by a bug and other parasites, then by a more fatal fungus for which no remedy could be found; so coffee was replaced by tea, and to some extent by the cinchona bark, which is such a precious exotic in Asia. Tobacco and cocoa are also grown; and rubber now threatens in some parts to oust what makes the name of Ceylon most familiar to our generation, the tea that, through its strength and cheapness, has taken such a prominent place in the market, along with that of Assam almost driving out the China leaf for which our grandmothers paid so high. It cannot be said that tea-gardens add to the beauty of a landscape, covering the mountain slopes almost to the top with a thin growth of this foreign shrub, in which only a few native trees are left standing to shelter the young plants; and about the planter's house the Australian eucalyptus-tree may have been introduced for the sake of the wholesome influence attributed to it on damp soil and air.

Tea-planting is a profitable business, requiring a good deal of experience and a carefulness not native here; so it is mostly in the hands of Englishmen, assisted by gangs of coolies. The first thing to be done is to clear the ground, then drains and paths are made, and the tea-seeds planted at regular intervals. The bushes, when they come up, should be covered with dry fern to keep off the scorching sun. Even when grown the tea-plants are not much to look at, kept pruned to the height of a foot or two, so that the buds and light-green shoots may be easily plucked. As these come out, the plucking goes on for months. It is done by natives, who must be careful not to take the old leaves, the tender tips making the best tea. These, packed in sacks, are often shot down from the hills, hooked on to a wire, along which they run as fast as a train. Thus the leaves reach a factory, where they are left to wither, and rolled till they begin to curl up, while still green and soft as a kid glove. Next they are spread out for a process of fermentation, then dried by hot air till they take that hard, curly look so well known to us at home. Artificial drying is necessary in a climate where rust and mildew hold ceaseless carnival. The leaves can now be sorted into teas of various qualities, according to size, before being carefully packed. The finest tea, sifted out from the rest, is the strongest, as one may know by the brew tea-dust makes. The coarsest leaves are sometimes cut up and mixed with the other kinds, but it is not our business to enter into the secrets of the trade. This

much must be said, that the use of machinery in Ceylon is an advantage in every way, as one might not be so fond of tea after seeing the manual processes it goes through among dirty Chinamen.

A less prosaic property of Ceylon is in its jewels, particularly the cat's-eyes, which have their turn of fashion in England, and the moonstones, a limpid and opalescent variety of felspar. Globe-trotters know well the jewel-merchants who board steamships with a glittering display of stones, for which they will ask a high price, but allow themselves to be beaten down, perhaps the griffin's first introduction to business methods of the East, where nobody is in a hurry,

Photo Skeen & Co

Tea Cultivation in Ceylon: Weighing the Crop

nobody takes his neighbour's word, and nobody expects a fair price without bargaining, nor even then as a matter of course. Most of the moonstones and other brilliants hawked in this way are not worth much; some, indeed, are suspected of coming from the mines of Bristol or Birmingham, now that many of the Ceylon gem-pits seem to have been worked out; but others still yield fine sapphires and a kind of pink rubies. Their abundance a century ago is attested by a story of Admiral Sir Samuel Hood bringing on board a sack of the gravel-deposit in which they are found, and putting each of his middies to sift out a plateful, the result being gems enough to set half a dozen rings. Of other mineral productions plumbago seems to be the most valuable.

"Gems of the ocean" also are taken off this coast, where large pearl-fishing fleets set out for the oyster-beds. The divers take turns in going down, each man weighted with a stone to bring him quickly to the bottom, where he tries to pick up as many oysters as possible in the half-minute or so he can stay under

water. When he can no longer hold his breath he signals to the men in the boat by tugging at a rope, and they at once draw him up. The danger is from sharks, to keep off which each boat used to carry a shark-charmer, while other conjurors on the shore muttered prayers and performed strange antics to drive the sharks away. Without the aid of such chaplains the divers formerly would not go to work. If a shark should come to attack one, the rest, in presence of a grim reality more potent than any trust in ridiculous spells, can hardly be persuaded to enter the water that day. But the pearls as well as the sharks may be exorcised; sometimes this fishery fails for years together, so that a "close time" is found necessary to give the grounds a chance of being replenished.

Not less precious, to eyes like Hæckel's, are the coral reefs, where beautifully-tinted and translucent creatures show "through the shallow water like beds of submarine flowers". The prevailing colour here, too, is green, as if the inhabitants of the water caught the reflection of the verdant shore. Before Hæckel, Baron Ransonnet-Villez, in his finely-illustrated book on Ceylon, pointed out how nature's mimicry had spread the same abundant hue over all forms of life, so that birds and beetles, lizards and butterflies, fishes and anemones, take on some shade of the colour that so masterfully overruns this island.

Not in all its aspects does Ceylon seem the paradise it pictured to Eastern eyes. Perhaps the prisoners we have confined here, Arabi Pasha exiled from Egyptian sands, and the Boers from their dry uplands, soon grew sick of such luscious beauty—as did poor Robert Knox, whose well-known story of captivity has so little to say of the country but as "covered with woods, that a man cannot see anything but just before him". Captain Basil Hall gives us one sketch on the coast, which suggests the tyranny as well as the glory of that climate: "Nothing could be imagined more wild and Arabian-Night-like than the mangrove avenue through which we rowed, or rather paddled, for the strait was so narrow that there was no room for the oars when pushed out to their full length. The sailors, therefore, were often obliged to catch hold of the branches and roots of the trees to draw the boats along. The foliage, as may be supposed where perennial heat and moisture occur in abundance, spread overhead in such extraordinary luxuriance that few of the sun's rays could penetrate the massy net-work of leaves and branches forming the roof of our fairy passage. Not a single bird could be seen, either seated or on the wing; nor was even a chirp distinguishable above the dreamy hum of millions of mosquitoes floating about in a calm so profound that it seemed as if the surface of the water had never been disturbed since the Creation. The air, though cool, felt so heavy and choky that, by the time we had scrambled to the end of this strange tunnel or watery lane, we could scarcely breathe, and were rejoiced to enter the open air again,—although, when we came out, the sun 'flamed in the forehead of the morning sky', and beat fiercely and hotly upon the parched ground, from which every blade of grass had been scorched away."

Railways here are being actively extended. By them and motor cars are now accessible to tourists imposing memorials of Ceylon's history, like the rock fortress of Sigiraya, and the ruins of the ancient capital, Anuradhapura, where a sacred bo-tree is boasted to be the oldest tree in the world.

Geographical and Commercial Survey

THE CHINESE EMPIRE

Area and Population

Provinces and Dependencies.	Area in Sq. Miles.	Population
Chekiang	36,500 ...	11,500,000
Fukien	46,500 ...	23,000,000
Honan	68,000 ...	35,500,000
Hunan	83,500 ...	22,000,000
Hupe	71,500 ...	35,000,000
Kansu	125,500 ...	10,500,000
Kiangsi	69,500 ...	26,500,000
Kiangsu	38,500 ...	14,000,000
Kwangsi	77,000 ...	5,000,000
Kwangtung (with Hainan)	100,000 ...	32,000,000
Kweichow	67,000 ...	7,500,000
Nganwhei	55,000 ...	23,500,000
Pechili	116,000 ...	21,000,000
Shansi	82,000 ...	12,000,000
Shantung	56,000 ...	38,000,000
Shensi	75,000 ...	8,500,000
Szechuen	218,500 ...	68,500,000
Yunnan	146,500 ...	12,500,000
Total of Provinces	1,532,500 ...	406,500,000
Manchuria	363,500 ..	8,500,000
Mongolia	1,367,500 ...	2,500,000
Tibet	463,000 ...	6,500,000
Sinkiang (Turkestan, &c.)...	550,500 ...	1,000,000
Grand total ...	4,277,000 ...	425,000,000

Foreign Possessions in China

Possessions.	Date of Acquisition.	Area in Sq. Miles.	Population.
British—			
Wei-hai-wei	1898 ...	285 ...	124,000
German—			
Kiao-chow	1897 ...	200 ...	18,000
Japanese—			
Port Arthur and Dalny	1905 ...	1220 ...	250,000
French—			
Kwang-chow-wan ...	1898 ...	— ..	--

Foreigners in the Open Ports in a recent Year

Nationality.	Number.
British	8,493
Japanese	16,910
Americans	3,380
Germans	1,850
French	2,143
Portuguese	2,462
Spaniards	249
Italians	412
Russians	682
Belgians	273
Others	1,147
Total ...	38,001

The foreign population of Shanghai, according to a recent municipal census, was 11,497, comprising 3713 British, 2157 Japanese, 1331 Portuguese, 991 Americans, 785 Germans, &c.

Population according to Religion

Most of the people are Confucians, Buddhists, and Taoists. Other religions number their adherents roughly as follows:—

Mohammedans	20,000,000
Roman Catholics	1,000,000
Protestants...	40,000

Principal Towns, according to Provinces

The capital of each province is placed first

CHINA PROPER—

1. *North-Eastern Provinces*—

Pechili: Paoting (150,000), Peking (capital of empire, 500,000), Kalgan (200,000), Chengte (Jehol, 250,000), Tungchow (100,000), Siwenhoa (90,000), Chingting (10,000), Yungping, Taku; treaty-ports, Tientsin (750,000) and Chinwang-tao (5000).

Shansi: Taiyuen (250,000), Yuenching (90,000), Pingyaohien (60,000), Pingyang (15,000), Tsochow, Lungan, Tatung, Soping, Ningwu, Fenchow.

Shantung: Tsinan (200,000), Wei (250,000), Chungkiakao (200,000), Tengchow (230,000), Yenchow (60,000), Taingan (115,000), Kinfao (25,000), Wuting, Tungchang, Tsaochow, Ichow, Laichow, Wei-hai-wei (British); treaty-ports, Chifu (100,000), Kiaochow (German).

2. *Middle-Eastern Provinces—*

Honan: Kaifeng (100,000), Hwaiking, Honan, Changte, Weihwei, Kweite, Chinchow, Nanyang, Shuning.

Hupe: Wuchang (500,000), Hanyang (400,000), Nganlo (60,000), Siangyang (40,000), Hwangchow, Shinan, Kingchow, Yünyang, Tengan; treaty-ports, Hankow (530,000), Ichang (50,000), Shasi (85,000), Lukikou.

Nganhwei: Nganking (40,000), Hweichow, Ningkwe, Chichow, Taiping, Fengyang, Yingchow, Lüchow; treaty-ports, the capital, Wuhu (123,000).

Kiangsu: Nanking (261,000), Yangchow (360,000), Changchow, Hwaingan; treaty-ports, the capital, Shanghai (651,000), Chinkiang (170,000), Suchow (500,000).

Chekiang: Hangchow (350,000), Shaohing (500,000), Lanki (200,000), Huchow (100,000), Tinghai (35,000), Kiahing, Yanchow, Chuchow, Taichow, Kiuchow: treaty-ports, the capital, Ningpo (260,000), Wenchow (80,000).

3. *South-Eastern Provinces—*

Hunan: Changsha (230,000), Siangtan (1,000,000), Changte, Hengchow, Paoking, Chinchow; treaty-ports, the capital, Yochow (20,000).

Kiangsi: Nanchang (100,000), Shaochow, Hukow (300,000), Fuchow, Kwangsin, Kianchang, Kanchow, Nan-ngan, Kingan, Shuichow, Nankang, Yaochow, Kingtechen; treaty-ports, Kiukiang (36,000), Wuhüe.

Fukien: Fuchow (624,000), Liangking (250,000), Changchow (500,000), Yanping (200,000), Tsongan (100,000), Shaowu, Kienning, Tingchow; treaty-ports, the capital, Amoy (114,000), Funing (8000).

Kwangsi: Kweiling, Sünchow, Taiping, Posé, Kingyuan, Pinglo; treaty-ports, Wuchow (59,000), Lungchow (12,000), Nanning (40,000).

Kwangtung: Canton (900,000), Fachan (500,000), Shuhing (200,000), Tungkung (120,000), Chihlung (100,000), Lohui (Hainan, 80,000), Chaoking (20,000), Lienchow (12,000), Chaochow, Whampoa, Leichow, Macao (Portuguese, 80,000), Victoria (Hong-kong, British); treaty-ports, the capital, Swatow (65,000), Kowloon, Lappa, Kiungchow (38,000), Pakhoi (20,000), Samshui (5000), Kongmoon (55,000), Takhing, Shiuhing, Waichow, Kwang-chow-wan (French).

4. *North-Western Provinces—*

Kansu: Lanchow (400,000), Tsingchow (160,000), Pingliang (60,000), Sining (60,000), Kungchang (50,000), Kanchow (20,000), Ninghia, Liangchow.

Shensi: Singan (1,000,000), Hanchung (80,000), Tungkwan (70,000), Sing-ngan, Fengtsiang, Tungchow, Yülin, Yen-ngan.

5. *Middle-Western Province—*

Szechuen: Chingtu (800,000), Tatsien, Suichow (300,000), Luchow (100,000), Kiating (25,000), Kweichow, Suiting, Paoning, Batang (3000), Litang, Yachow, Fuchow; treaty-ports, Chungking (700,000), Wanhsien.

6. *South-Western Provinces—*

Kweichow: Kweiyang, Nganshun, Chinyuan, Tuyun, Pingyuan, Tsuni, Suchow.

Yunnan: Yunnan (50,000), Chaotung (50,000), Tali (23,000), Momein (5000), Tungchwan, Puerh, Lin-ngan, Atentze; treaty-ports, Mengtse (15,000), Ssumao (15,000), Tengyueh (10,000).

PROVINCE OF SINKIANG (Turkestan, Zungaria, &c.)—

Urumtsi (30,000), Yarkand (60,000), Kashgar (50,000), Khotan (Ilchi, 120,000), Sachow (20,000), Kuldja (15,000), Khami (Hami, 7000), Turfan (10,000), Karashar (11,000), Kiria (15,000), Sanju (35,000), Maralbashi (10,000), Aksu (20,000), Kuchar (15,000), Kurla (6000), Sairam.

TIBET—

Lhasa (25,000), Shigatze (9000), Chetang (13,000), Gyangtze (12,000), Gartokh; open to trade, Yatung.

MONGOLIA—

Urga (30,000), Dolon-nor (30,000), Paku (20,000), Uliasutai (4000), Kobdo (3000), Maimachin (3000).

MANCHURIA—

Mukden (200,000), Kirin (120,000), Tsitsihar (30,000), the capitals of the three provinces of Fengtien, Kirin, and Helungkiang respectively; Kwangchangtsu (100,000), Petuna (Sinchung), Mergen (5000), Liaoyang, Ninguta, Port Arthur (Japanese); open ports, Newchwang (74,000), Dairen (Japanese), Antung, Tatungkow, Sansing, Manchouli, Harbin, Suifenho, Aigun.

Climate

The following table gives some particulars regarding the temperature of a few typical places:—

Stations (with Latitude)	Mean Annual Temperature (° F.).	Warmest Month (° F.)	Coldest Month (° F.).	Mean Annual Range (Deg. F.)
Peking (39° 57′)	52.9	78.8	23.5	93·6
Taiyuen	—	79.9	20.8	—
Shanghai (31° 12′)	—	81.3	36.9	80.1
Chungking	—	80.2	47.3	65.2
Canton (23° 7′)	70.2	82.8	54.7	59.9
Macao (22° 11′)	—	84.2	59.5	44.8

The following table gives the annual rainfall for a number of stations. The wettest months are June, July, and August.

Stations.	Latitude (N.).	Rainfall (in inches)
Newchwang	40° 57′	20.94
Peking	39° 57′	24.34
Chifu	37° 34′	25.04
Chinkiang	32° 12′	33.46
Wuhu	31° 22′	43.25
Shanghai	31° 12′	45·59
Hankow	30° 33′	50.43
Ichang	30° 12′	44.03
Ningpo	29° 58′	69.51
Kinkiang	29° 43′	59.24
Wenchow	28° 0′	62.67
Fuchow	26° 8′	50.39
Amoy	24° 27′	63.26
Swatow	23° 20′	54.95
Canton	23° 7′	64.86
Macao	22° 11′	68.45
Hong-Kong	22° 8′	89.35
Pakhoi	21° 29′	78
Kiungchow	20° 3′	53.9

According to the results of eight years' observations in the French Mission Station at Shanghai, the absolute maximum and minimum temperatures were 102.2° F. and 12.2° F. respectively, giving an extreme range of 90 deg. F. January has the lowest average minimum (17.8°), and July has the highest average maximum (97.2°). The total rainfall for the year averaged 42.46 inches. The wettest month was June (7.86 inches), and the driest December (1.39 inch).

Principal Mountain Systems

I. KUEN-LUN SYSTEM—
- (*a*) Kuen-Lun proper (over 20,000 ft.); in northern Tibet.
- (*b*) Dang-la Mountains (about 20,000 ft.); in Tibet.
- (*c*) Altyn-Tagh, Humboldt, and Nan-Shan Mountains (16,000 ft.); Turkestan and Tibet.
- (*d*) Eastern Kuen-Lun, comprising Min-shan, Pe-shan, Tsing-ling, Fu-niu-shan, Mu-ling, &c.; Ta-pei-shan, in Tsing-ling (12,000 ft.); in provinces Kansu, Shensi, Honan.
- (*e*) North-eastern Kuen-Lun; frontiers of Mongolia and China proper.

II. THIAN-SHAN SYSTEM, including many branches; Tagharma (25,800 ft.); Khan-Tengri (24,000 ft.); in northern Turkestan.

III. ALTAI SYSTEM (12,000 ft.), comprising the Sayan, Tannu, Great Altai, Hurka, and other ranges; in Mongolia.

IV. MANCHURIAN RANGES—
- (*a*) Khingan Range (8000 ft.); on the Mongolian frontier.
- (*b*) Ilykhuri-alin and Duss-alin; in the north.
- (*c*) Shanyan-alin (11,000 ft.); on the Korean frontier.

V. CHINA PROPER (left bank of Hoang-ho)—
Wutai-shan (11,460 ft.); in Shansi (also others).

VI. SZECHUEN RANGES—
- (*a*) Ta-pa-shan Mountains; on frontier of Shensi.
- (*b*) Yun-ling Mountains.

VII. SOUTH CHINA RANGES—
- (*a*) Shi-shan (16,000 ft.), and Ya-ling; in Kiangsi and Chekiang.
- (*b*) Ta-yu-shan; frontiers of Fukien and Kiangsi.
- (*c*) Nan-shan; separates Kweichow and Hunan from Kwangsi and Kwangtung.
- (*d*) Yung-ling Mountains; in Hunan.
- (*e*) Mountains of Yunnan and Kwangsi.

Principal Rivers, with the Open Ports on them

Rivers.		Open Ports.
A. FLOWING INTO YELLOW SEA—		
Liao-ho (Sira-muren; 700 miles)		Newchwang (mouth).
Ta-ling-ho		———
Lan-ho		———
*Pei-ho (350 miles)		Tientsin.
*Hoang-ho (2500 miles)		———
*Wei-ho (right)		———
Hwei-ho		———
B. FLOWING INTO EAST CHINESE SEA—		
*Yang-tse-kiang (3500 miles)		Chungking, Ichang, Shasi, Yochow, Lu-ki-kou, Hankow, Wuhu, Kiukiang, Nganking, Tatung, Wuhu, Nanking, Chinkiang, Shanghai (mouth).
Ya-lung-kiang, Min-ho, Kia-ling-kiang, *Han-kiang	Left	
*Wu-kiang, Yuan-kiang, Heng-kiang, Kia-kiang	Right	———
Tsien-tang-kiang (200 miles)		Hangchow (mouth).
Takhi (Wu-kiang; 150 miles)		Wenchow (mouth).
Min-kiang (200 miles)		Fuchow (mouth).
C. FLOWING INTO SOUTH CHINESE SEA—		
Kiu-lung-kiang		Amoy (mouth).
Han-kiang (200 miles)		Swatow (mouth).
Tung-kiang (300 miles)		———
*Si-kiang (Chu-kiang or Canton; 1000 miles)		Lungchow, Wuchow, Takhing, Shiu-hing, Samshui, Canton, Kumchuk, Kongmung, Kowloon, Lappa.
*Tan-kiang (Kwei-kiang), *Pe-kiang	Left	
*Song-ka (Red River—upper course; 750 miles)		Mengtse (near river).
Mekong (upper course; 2600 miles)		Ssumao (near river)
D. FLOWING INTO SEA OF OKHOTSK—		
*Amur (frontier; 2750 miles)		———
Sungari, Ussuri (frontier)	Right	———
E. FLOWING INTO BAY OF BENGAL—		
Sanpo (Upper Brahmaputra)		———
Salwin (upper course in Yunnan)		———
F. FLOWING INTO LAKE LOB-NOR—		
Tarim		———

Those marked with an asterisk are navigable, as follows:—*Pei-ho* below Tung-chow; *Hoang-ho* from Fen-ho mouth to Wei-ho mouth, and from Meng-tsin (near Honan) to Lung-men-kow (east of Kaifeng); *Wei-ho* to Singan-fu; *Yang-tse-kiang* below Chungking for steam vessels; *Han-kiang* for greater part of its length, above Han-chung; *Wu-kiang* up to Sz'nan; *Si-kiang* easily navigable up to Wuchow, also (with hindrances) for smaller vessels to Lungchow; *Tan-kiang* up to Hsing-ngan; *Pe-kiang* up to Nan-hsiung; *Song-ka* below Mang-hao; *Amur* throughout greater part of its length.

PRINCIPAL DRAINAGE BASINS

Rivers.	Area of Basin in Sq. Miles.
Amur	776,000
Yang-tse-kiang	690,000
Hoang-ho	380,000

Principal Productions

I. *Vegetable Products—*

Rice (especially in south), wheat, maize, barley, oats, millet, peas, beans, tea (especially s.),

bamboo, hemp and similar plants, flax, indigo, mulberry (for silk-worms), opium poppy, cotton, star anise, rhubarb (especially W. of China proper), camphor, numerous fruits (oranges, apples, litchi, &c.), potato and sweet-potato, tobacco, sugar-cane, ground-nuts, ramie, numerous medicinal and tinctorial plants.

II. *Animals*—

Pigs (abundant), horses (generally small), cattle, sheep, goats (especially in Tibet), buffaloes, camels (especially in Mongolia, &c.), yaks (especially in Tibet), mules, asses, dogs, bees, poultry, fish (abundant), cormorants (trained for fishing).

III. *Minerals*—

Gold, silver, iron (especially Shansi, Szechuen, Hunan, Fukien, Chekiang, Shantung, and Yunnan), copper (chiefly Kweichow, Yunnan), tin, lead, zinc, mercury, nickel, marble, building-stone, coal (especially Shansi, Pechili, Hupe, Hunan, Szechuen, Shantung, Kwangtung), salt, precious stones, rock-crystal, kaolin, petroleum.

IV. *Manufactures*—

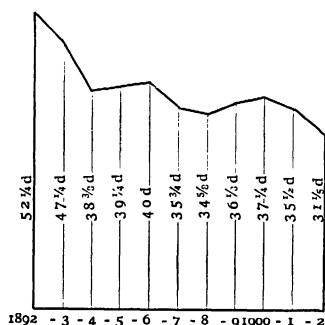
Silks, cottons, China-grass fabrics, soap, iron and steel, paper, lacquered goods, iron-working, bell-casting, &c.

Currency

A. Money of Account

I.—*Tael System*

1 Tael (or Leang)	=	10 Mace.
1 Mace (or Tsein)	=	10 Candareen.
1 Candareen (or Fun)	=	10 Cash (or Le).

The Tael is a weight and not a coin, and there are different taels, representing different weights of silver. The principal one is the *Haikwan* or *Customs Tael*,

Variation in value of Haikwan Tael during 1892–1902

equal to 590.4598557 grains of silver. The *Shanghai Tael* is equal to 650·553542 grains, and the *Canton Tael* to 579·84968 grains.

The sterling value of the tael varies with the market price of silver. The variation in the value of the Haikwan tael in a number of recent years is represented by the above graph. In 1906 its value was 3s. 3½d.

II.—*Dollar System*

1 Dollar = 100 Cents.

This system is in use in Hong-Kong, Canton, Amoy, Fuchow, and Swatow.

The value of the dollar in sterling varies with the price of silver. It was formerly 4*s*. 2*d*., but it has fallen (with fluctuations) to about 2*s*.

The standard units of the two systems are connected by the equation, 730 cash = 1 dollar, but the market rate usually differs somewhat from this ideal rate.

B. Coins and Notes

Before 1890 there was only one kind of coin in China, the copper cash. It was circular, and had a square hole in the centre. Cash were kept on strings of a hundred and a thousand. The variation in the silver-value of copper cash may be thus indicated. In 1882 one tael (5*s*. 2*d*.) at Shanghai was equal to 1690 cash; in 1902 one tael (2*s*. 7⅛*d*.) was equal to 1240 cash.

Since 1890 the coins issued by the imperial mints have been as follows:—

Coins	Fineness	Sterling Value £	s.	d.
Silver—				
Dollar ...	... .9 ...	0	2	0
Half-dollar	... .86 ...	0	1	0
20 Cents ...	... .82 ...	0	0	4.8
10 Cents ...	... .82 ...	0	0	2.4
5 Cents ...	... .82 ...	0	0	1.2
Brass—				
Cash ...	... — ...	0	0	0.033

Five- and ten-cash pieces are also now being minted from imported copper.

The weight of the silver dollar is 420.88 grains.

China has no government bank-notes and no authorized private ones, but many banks issue notes for local circulation.

C. Coins of Hong Kong

Since 1895 the standard of value is the Mexican silver dollar weighing 417.74 grains, and of fineness 902.7 thousandths. The British dollar and the Hong-Kong dollar are regarded as equal to the Mexican dollar in value. The coins are as follows:—

Coins	Fineness	Sterling Value £	s.	d.
Silver—				
Mexican Dollar ...	.9027 ...	0	2	0
British Dollar ...	.9 ...	0	2	0
Hong-Kong Dollar	.9 ...	0	2	0
Half-dollar ...	.8 ...	0	1	0
20 Cents ...	... .8 ...	0	0	4.8
10 Cents ...	... .8 ...	0	0	2.4
5 Cents ...	... .8 ...	0	0	1.2
Bronze—				
Cent ...	... — ...	0	0	0.24
Cash (or Mil)	... — ...	0	0	0.024

Chopped dollars are those marked with the chop or sign of a native merchant. The others are *clean*.

Above two dollars the three standard silver dollars are the only legal tender. Bronze coins are legal tender only up to the sum of one dollar.

Weights and Measures

A. Linear Measure

1 Yin = 10 Chang.
1 Chang = 10 Ch'ih.
1 Ch'ih = 10 Ts'un.
1 Ts'un = 10 Fêu.
1 Pu = 5 Ch'ih.
1 Li = 360 Pu.
1 Tu = 250 Li.
1 Kung = 5.6 Ch'ih.

The *ch'ih*, or Chinese foot, varies from place to place in the empire, and is of different lengths for different purposes. The extreme limits of variation are 9 and 16 inches. The Customs ch'ih, defined in the treaty of 1842, is equal to 14.1 inches.

Taking the ch'ih at 14.1 inches, the *li*, or standard measure of distance, works out at 705 yards, and the *tu* at 250 yards more than 100 miles.

The *pu* and the *kung*, which vary considerably, are used in measuring land.

B. Surface Measure

1 Ch'ing (or Fu) = 100 Mou.
1 Mou = 4 Chüo.
1 Chüo = 15 Ching.
1 Ching (or Sq. Chang) = 100 Sq. Ch'ih.

Taking the ch'ih as 14.1 inches, the *mou* works out at 920.416 sq. yards, and the *ch'ing* at 92041.6 sq. yards, or 19.01687 acres. The treaty mou is 7260 sq. feet.

C. Cubic Measure

For capacity (dry goods) the following measures are used:—

1 Hu = 5 Tou.
1 Tou = 10 Shêng.
1 Shêng = 10 Hoh.

The *tou* is of variable value, but the standard tou contains 2½ imperial gallons. The number of tou in a *hu* is not constant throughout the empire. The Chinese use measures of capacity to a very limited extent.

In some cubic measurements the *ma* or *fang* of 100 cubic ch'ih is used. It is nearly equal to 162¼ cubic feet.

D. Weight

1 Picul (or Tan) = 100 Chin.
1 Chin (or Catty) = 16 Liang.
1 Liang (or Tael) = 24 Chu.
1 Chu = 10 Lei.
1 Lei = 10 Millet Grains.

The *picul* is equal to 133⅓ lbs. avoirdupois.

The tael is subdivided decimally for the weighing of gold, silver, and a few other commodities, the names of the subdivisions in descending order being *ch'ien*, *fên*, *li*, *hao*, *ssu*, and *hu*.

The British imperial weights and measures are used in Hong-Kong.

Finance

A. Revenue

It is not yet possible to give satisfactory statements of the revenue and expenditure of the Chinese empire. The following table contains Sir Robert Hart's recent estimate of the revenue, based upon the records of the Board of Revenue:—

Sources	Amount (in Haikwan Taels).
Land tax (in silver)	26,500,000
,, (in grain)	3,100,000
Provincial duties...	1,600,000
,, receipts (various) ...	1,000,000
Salt tax	13,500,000
Likin duties	16,000,000
Native Customs	2,700,000
Maritime Customs—	
General Cargo...	17,000,000
Foreign Opium	5,000,000
Native Opium	1,800,000
Total Revenue... ...	88,200,000
	(= £11,466,000)

There are also large provincial revenues which do not appear in the imperial accounts.

The following table shows the revenue of the Imperial Maritime Customs for a recent year:—

Sources	Amount (in Haikwan Taels).
Import duties	16,100,954
Export duties	9,825,706
Coast Trade duties	2,208,192
Tonnage dues	1,326,619
Transit dues	2,277,101
Opium duties	4,330,083
Total ...	36,068,655
	(= about £6,000,000)

B. Expenditure

The following table contains Sir Robert Hart's recent estimate of the imperial expenditure:—

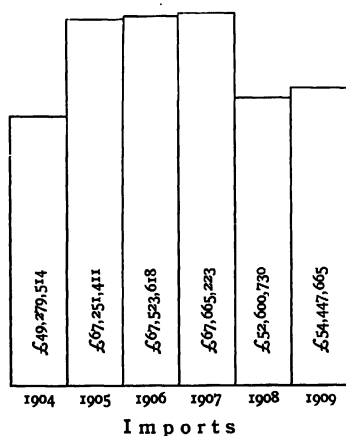
Heads.	Amount (in Haikwan Taels)
Debt Charges	24,000,000
Imperial Household	1,100,000
Legations	1,000,000
Central Administration	10,000,000
Bannermen (Standing Army) ...	1,380,000
Army	30,000,000
Navy	5,000,000
Customs (including lighthouses, &c.)	3,600,000
Railways	800,000
River Works	940,000
Provincial Administration ...	20,000,000
Contingent Reserve	3,300,000
Total ...	101,120,000
	(= £13,145,600)

C. Public Debt

The following table shows the debts incurred from 1894. The loans of 1874, 1878, 1884, 1886, and 1887 have been mostly paid off.

Loans, &c.	Amount (in £ sterling).
1894—Loan at 7 per cent ...	1,635,000
1895—Loan at 6 per cent ...	3,000,000
1895—Loans at 6 per cent ...	1,000,000
1895—Loan at 4 per cent (guaranteed by Russia) ...	15,820,000
1896—Loan at 5 per cent (Anglo-German)	16,000,000
1898—Loan at 4½ per cent ...	16,000,000
1899—Railway Loan at 5 per cent	2,300,000
1901—Indemnity at 4 per cent	64,000,000
Total Debt ...	£119,755,000

The earlier of the above loans were raised to meet the war indemnity which China agreed to pay to Japan by the Treaty of Shimonoseki in 1895. The indemnity amounted to £34,500,000. The 1901 indemnity is due to the great Powers (Britain, France, Germany, Italy, Austria-Hungary, Russia, Holland, Belgium, Japan, United States) for damage done by the Boxers during the revolt of 1900.

All the above loans from 1894 to 1898 inclusive are secured on the Imperial Maritime Customs. The railway loan of 1899 is secured on the revenue of the Imperial Northern Railway. The indemnity of 1901 is secured on the unappropriated proceeds of the Imperial Maritime Customs, the transit likin administered as part of the Imperial Maritime Customs, and the unappropriated part of the salt tax. It is to be repaid by 1941 in annual instalments.

D. Financial System

The Board of Revenue (Hu-Pu) at Peking issues annually to each of the provincial governors or viceroys a precept for the sum required from his province for the following year. The sum actually collected exceeds this by the amount required for the provincial administration, both civil and military, and also by a large additional sum which goes to enrich the officials interested.

The land tax, which is levied at a rate varying from 10*d.* to 6*s.* 6*d.* per acre according to province, has a nominally fixed rate of incidence, but it is in practice increased by imposts under other names. Salt is regarded as a monopoly of the government, and producers are required to sell their salt to government agents, who re-sell it to merchants with salt warrants.

Likin is a tax on merchandise in course of transportation from the ports to the interior, payable at certain places on the route. It was abolished by treaty in 1902, when the customs duties were increased.

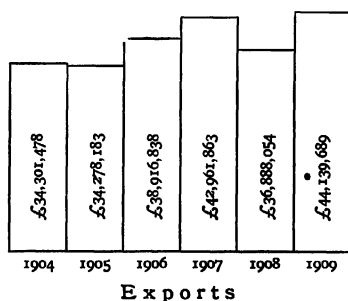
The most efficient department of Chinese administration is the Imperial Maritime Customs, so long under Sir Robert Hart. It collects the revenues on the foreign trade of the treaty ports, and controls the administration of the lights on the coast. Since 1901 it has also had charge of the collection of native customs or transit likin within a radius of 50 li of the treaty ports.

Commerce

A. The Course of Trade

The following diagrams represent the market values, in sterling, of the goods imported into and exported from China in each of the years from 1904 to 1909 inclusive. The rate of exchange varies greatly from year to year, and consequently the diagrams would have shown a considerably different movement of trade if the tael values had been adopted instead of sterling values.

Imports

Exports

DISTINGUISHED TRAVELLERS AND EXPLORERS.—I

James Theodore Bent (1852–1897); archæological researches in Asia Minor, Bahrein Islands, Mashonaland, Abyssinia, South Arabia, &c.

Isabella L. Bishop (born Bird, 1832–1904); first lady F.R.G.S.; North America, Sandwich Islands, Japan, Persia and Kurdistan, Tibet, Korea, China, Siberia, Morocco.

Sir Samuel White Baker (1821–1893); discovered Albert Nyanza (1864) and explored other parts of Nile basin; also Ceylon and Asia Minor; knighted 1866.

Pierre Gabriel Bonvalot (born in 1853); French traveller; Central Asia, notably in 1889–90 with Prince Henry of Orleans.

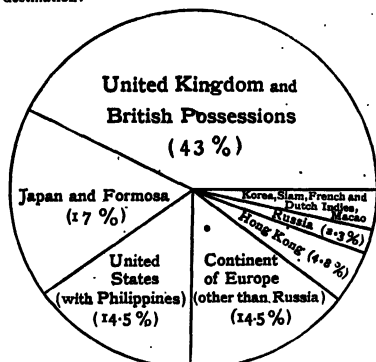
Verney Lovett Cameron (1844–1894); naval officer; crossed Africa in 1873–75; also Asiatic Turkey and Gold Coast.

Archibald Ross Colquhoun (born in 1848); China, Indo-China, Burma, Japan, Mongolia, Siberia, Dutch East Indies, Philippines, Rhodesia, Central America, &c.

Heinrich Barth (1821–1865); German traveller; North African Coast, Syria, and Asia Minor in 1845–48; crossed Sahara from Tripoli and explored in Sudan (Nigeria, Timbuctoo, Bagirmi, Wadai, &c.) in 1850–55.

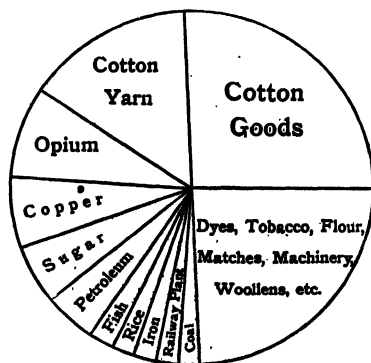
James Bruce (1730–1794); Abyssinia and sources of Blue Nile in 1770–71.

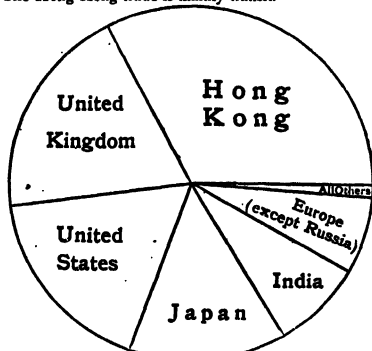
Sir Richard Francis Burton (1821–1890); pilgrimage to Mecca in disguise, 1853; with Speke discovered Lake Tanganyika, 1858; Somaliland, Gold Coast, &c.; K.C.M.G., 1885.

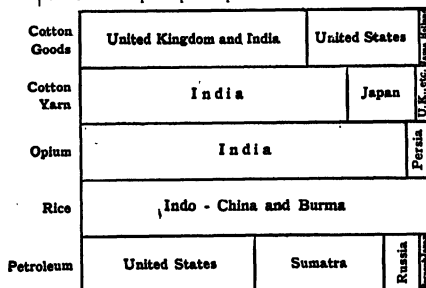
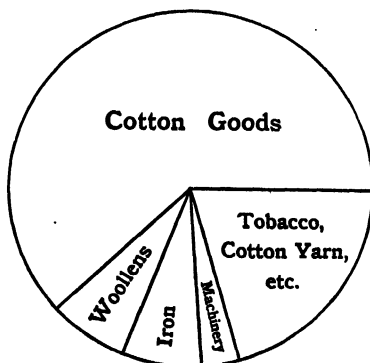
The following circle diagram represents the distribution of the total foreign trade in 1902 amongst the chief countries, the transit trade of Hong-Kong being conjecturally assigned to the true countries of supply and destination:—

Total Trade of China according to Countries

The above diagram is based upon the results of an examination of the Chinese trade returns by Mr. J. W. Jamieson, formerly Commercial Attaché to His Majesty's Legation at Peking. The results are contained in a consular report on the Foreign Trade of China for the year 1902, forming No. 3092 of the Annual Series issued by the Foreign Office. Mr. Jamieson emphasizes the conjectural character of his distribution of the trade of the free port of Victoria, Hong-Kong, for which no statistical records of imports or exports are kept. One result of his analysis is to reduce the share of the United Kingdom and British possessions in the trade of China from 62 to 43 per cent.

B. Imports

The following circle diagram shows the relative values of the principal imports in a recent year:—

Principal Imports into China

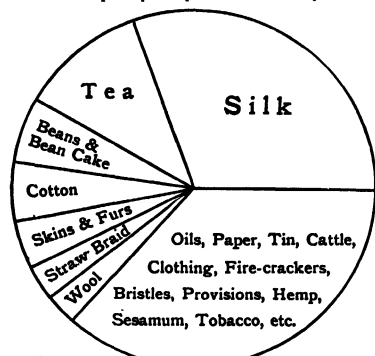
The following circle diagram shows the relative values of the imports from different countries in a recent year. The Hong-Kong trade is mainly transit.

Principal Sources of Imports into China

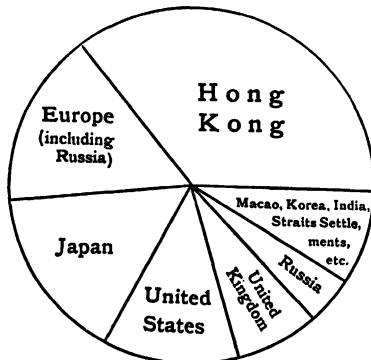
The following diagram shows the chief sources of some of the principal imports:—

Sources of the Chief Imports into China

Principal Imports from Britain into China

The above circle diagram shows the relative value of

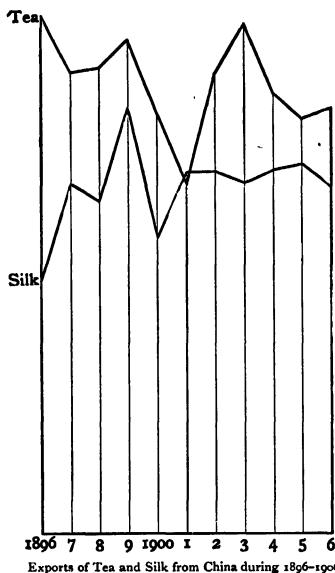
the various commodities imported from the United Kingdom into China (inclusive of Hong-Kong and Macao) according to the Board of Trade Returns for 1906; total value, £15,266,047.

C. Exports

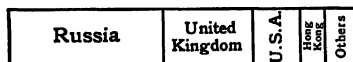
The following circle diagram shows the relative values of the principal exports in a recent year:—

Principal Exports from China

The following circle diagram shows the relative importance of the chief countries as importers of Chinese goods. The trade of Hong-Kong is mainly transit.

Chief Destinations of Exports from China

The following graphs represent the variation in the weight of tea and silk exported during the period 1896–1906. The scale for tea is one-fifth of that for silk.

The weight of silk exported, as represented in the graph, includes raw white silk, raw yellow silk, raw wild silk, steam filature silk, cocoons, refuse cocoons, piece-goods, and various products. The total weight of silk exported in 1906 was 30,508,530 lbs. The export of tea in that year was 187,217,067 lbs., comprising black, green, dust, brick, and tablet tea.

Exports of Tea and Silk from China during 1896–1906

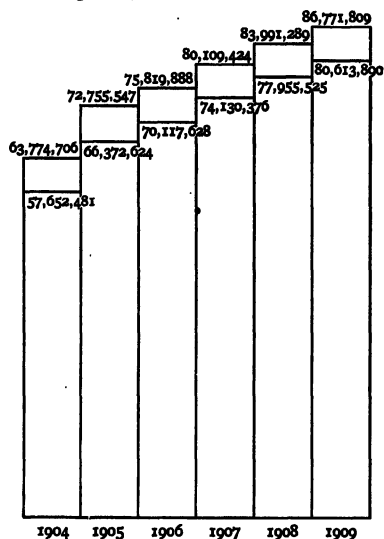
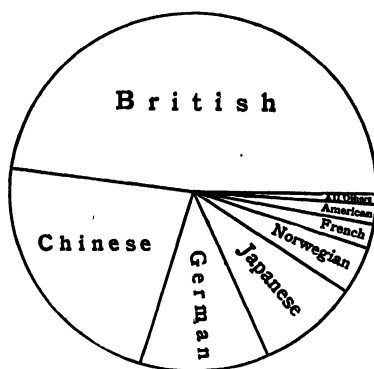
The following diagram shows the destination of the exported tea in a recent year:—

Russia	United Kingdom	U.S.A.	Hong Kong	Others

Destination of Tea exported from China

The following circle diagram shows the principal British imports from China (including Hong-Kong and Macao) according to the Board of Trade Returns for 1906; total value, £3,952,960.

Principal Exports from China to the United Kingdom

Shipping

The following diagram shows the total tonnage entered and cleared at the Chinese ports in 1904–1909. The line across each rectangle separates steam (below) from sailing tonnage (above).

The following circle diagram represents the distribution of the tonnage entered and cleared according to nationality:—

Treaty Ports

The following table shows the treaty ports of China in order of opening, with the value of imports and exports and the tonnage of shipping entered in a recent year:—

Ports.	Date of Opening.	Net Foreign Imports (£).	Total Exports (£).	Tonnage Entered.
*Canton (Kwangtung)	1842	4,200,000	7,250,000	2,790,000
*Shanghai (Kiangsu)	1842	12,500,000	13,160,000	8,520,000
*Ningpo (Chekiang)	1842	1,620,000	1,150,000	732,000
*Fuchow (Fukien)	1842	1,240,000	1,360,000	454,000
*Amoy (Fukien)	1842	1,560,000	430,000	1,060,000
*Swatow (Kwangtung)	1858	2,370,000	2,000,000	1,290,000
Chinkiang (Kiangsu)	1858	3,370,000	1,490,000	3,380,000
Tientsin (Pechili)	1861	10,700,000	3,630,000	1,200,000
*Newchwang (Manchuria)	1861	2,280,000	2,460,000	640,000
Hankow (Hupe)	1861	6,000,000	8,950,000	2,150,000
*Chifu (Shantung)	1861	2,460,000	1,990,000	1,750,000
Kiukiang (Kiangsi)	1861	1,330,000	2,250,000	2,850,000
Wuhu (Nganhwei)	1876	1,230,000	2,120,000	3,080,000
*Pakhoi (Kwangtung)	1876	260,000	140,000	74,000
*Kiungchow (Hainan)	1876	550,000	480,000	350,000
Ichang (Hupe)	1876	180,000	540,000	245,000
*Wenchow (Chekiang)	1876	170,000	150,000	31,000
*Kowloon (Kwangtung)	1887	3,560,000	2,390,000	—
*Lappa (Kwangtung)	1887	1,740,000	820,000	—
Mengtse (Yunnan)	1889	940,000	850,000	—
Lungchow (Kwangsi)	1889	20,000	10,000	—
Chungking (Szechuen)	1891	2,470,000	1,810,000	—
*Hangchow (Chekiang)	1895	720,000	1,620,000	268,000
Suchow (Kiangsu)	1895	280,000	520,000	—
Wuchow (Kwangsi)	1896	1,080,000	620,000	210,000
Shashi (Hupe)	1896	150,000	90,000	300,000
Ssumao (Yunnan)	1897	32,000	5,000	—

Ports.	Date of Opening.	Net Foreign Imports (£).	Total Exports (£).	Tonnage Entered.
Kongmoon (Kwangtung)	1897	400,000	210,000	—
Samshui (Kwangtung)	1897	370,000	160,000	—
Nanking (Kiangsu)	1899	790,000	560,000	2,124,000
*Funing or Santuao (Fukien)	1899	6,000	370,000	—
Yochow (Hunan)	1899	29,000	57,000	—
*Tsingtao (Kiao-chow—Shantung; German)	1899	2,820,000	1,410,000	500,000
*Chinwangtao (Pechili)	1901	720,000	250,000	284,000
Changsha (Hunan)	1902	470,000	210,000	104,000
Tengyueh (Yunnan)	1902	180,000	45,000	—

The asterisks denote seaports; the other towns are river ports or inland centres of trade. Other ports are: Aigun, Sansing, Manchouli, Harbin, Suifenho, Antung, Tatungkow, and Dairen, all in Manchuria, and Nanning, in Kwangsi.

Means of Communication

The railways of China, completed or under construction, are as follows:—

1. *Chinese Eastern Railway* (Russian).—Kwangchangtsu to Harbin, &c.; 1077 miles. 5-foot gauge.
2. *Tsitsihar Light Railway.*—Tsitsihar to Ang-ang-ki on 1; 17 miles. Metre gauge.
3. *South Manchurian Railway* (Japanese).—Dairen to Kwangchangtsu, with branches to Port Arthur, Newchwang, Antung, &c.; 720 miles. Standard gauge.
4. *Imperial Railways of North China.*—Peking to Mukden, with branches to Newchwang, Tungchow, &c.; 595 miles. Standard gauge.
5. *Peking-Kalgan Railway.*—124 miles. Standard gauge.
6. *Peking-Hankow Railway.*—824 miles. Standard gauge.
7. *Tientsin-Pukow Railway.*—675 miles. Standard gauge.
8. *Shantung Railway* (German).—Kiaochow to Tsinan; 274 miles. Standard gauge.
9. *Tsaochwang-Taierhchwang Railway.*—In South Shantung; 35 miles. Standard gauge.
10. *Shansi Railway.*—From 6 to Taiyuen; 151 miles. Metre gauge.
11. *Kaifeng-Honanfu Railway* (Belgian).—140 miles. Standard gauge.
12. *Taokow-Tsinghwachen Railway.*—Crossing 6 at Sinsiang; 96 miles. Standard gauge.
13. *Szechuen-Hankow Railway.*—Chingtu to Hankow; 800 miles. Standard gauge.
14. *Canton-Hankow Railway* (with branches).—847 miles. Standard gauge.
15. *Kiangsi Railway.*—Kiukiang to Nanchang; 82 miles. Standard gauge.
16. *Anwhei Railway.*—Wuhu to Kwangtehchow; 150 miles. Standard gauge.
17. *Shanghai-Nanking Railway.*—236 miles. Standard gauge.
18. *Shanghai-Hangchow-Ningpo Railway.*—218 miles. Standard gauge.
19. *Fukien Railway.*—Changchow to Amoy; 33 miles. Standard gauge.
20. *Swatow-Chaochowfu Railway.*—24 miles. Standard gauge.
21. *Canton-Kowloon Railway.*—111 miles. Standard gauge
22. *Sunning Railway.*—55 miles. Standard gauge.
23. *Yunnan Railway* (French).—Laokai to Yunnan; 291 miles. Metre gauge.

Total length, about 7600 miles.

KOREA

Area and Population

Area, 84,000 square miles; population, 17,000,000.

Foreign Population

Japanese	90,000
Chinese	4,000
Americans	300
British	150
French	100
Germans	50
Russians	30
Others	—
Total about	95,000

Religions

Buddhism and Confucianism are the national religions. The number of Christians at the end of 1901 was as follows:—

Roman Catholics	55,806
Protestants	27,980
Greek Orthodox	24
Total	83,810

Principal Towns

Towns.	Population.
Seoul (Söul, capital)	200,000
Songdo (old capital)	60,000
Pingyang	40,000
Fusan	50,000
Wonsan	10,000
Chemulpo	6,000

And the other ports (see below).

Climate

The following table gives particulars of temperature and rainfall for three stations:—

Stations (with N. lat.).	Mean Annual Temp. (°F.).	Max. Temp. (July-Aug., °F.).	Min. Temp. (Dec.-Jan., °F.).	Annual Rainfall in inches.
Wonsan (39° 9′)	50.9	89.1	14	48.01
Chemulpo (37° 29′)	48.9	89.1	2.8	34.52
Fusan (35° 5′)	53.4	88.2	21.8	52.85

The rain falls mostly in July and August on the west and north-east coasts; from April to July on the south coast.

Mountains

(1) Main range through whole length of peninsula, nearer east coast; generally about 4500 ft. high; chief peak, Paik-tu-san (8900 ft.).

(2) Lower hills branching westwards; height about 1500 ft.

(3) A chain east of the lower coast of the Yalu river; height about 5800 ft.

Principal Rivers

A. FLOWING INTO YELLOW SEA:
- *Yalu (frontier 300 miles) } Korea Bay.
- Tai-dong } Korea Bay.
- *Han.
- Keum.
- Mokpo.

B. FLOWING TO KOREA STRAIT:
- Siom-mo-gang.
- *Nak-tong.

C. FLOWING TO SEA OF JAPAN:
- Tiumen (frontier).

Those marked with an asterisk are the most important.

Principal Productions

I. *Vegetable Products*—
Rice (especially south), millet, wheat, barley, oats, rye, beans, potato (north), tobacco, ginseng, sesamum, pepper, hemp, cotton.

II. *Animals*—
Cattle, pigs, dogs, ponies, poultry; silk-worms (chiefly in south); fish.

III. *Minerals*—
Gold, silver, iron, copper, lead, coal, tin, mercury, salt.

IV. *Manufactures*—
Sea-salt, paper, silk, horse-hair crinoline (for hats), bamboo blinds, hats, mats, pottery, hemp-cloth (for mourning), brass bowls, grass-cloth, ginseng.

Currency

A. MONEY OF ACCOUNT

1 Dollar = 5 Liang.
1 Liang = 20 Cents.
1 Cent = 5 Cash.

B. COINS AND NOTES

Coins.	Fineness.	£	s.	d.
Silver—				
Dollar	.9	0	2	0.58
Liang	.9	0	0	4.91
10 Cents	—	0	0	2.45
5 Cents	—	0	0	1.22
Nickel—				
2½ Cents	—	0	0	0.61
Copper—				
5 Cash	—	0	0	0.25
Brass—				
Cash	—	0	0	0.05

(Sterling Value in £ s. d.)

The limit of legal tender for silver liang coins is 20 dollars, and for nickel coins 1 dollar.

The above system was introduced in 1894, but Japanese silver yens (not used in Japan since 1897) were put into circulation in place of the dollar.

A new currency, consisting of nickel coins for 5 sen and silver coins for 20 and 50 sen, was introduced in 1905.

Weights and Measures

Chinese weights and measures are used in Korea.

Finance

A. Revenue

The following table shows the revenue for a recent year:—

Sources.	Amount (in Yen).
Land tax	5,208,228
House tax	234,096
Customs	850,000
Other Sources	1,192,390
Total	7,484,714
	(= about £750,000)

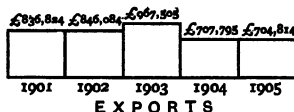
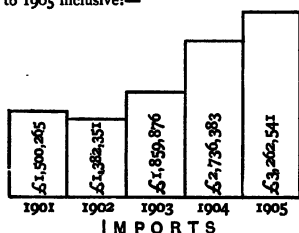
B. Expenditure

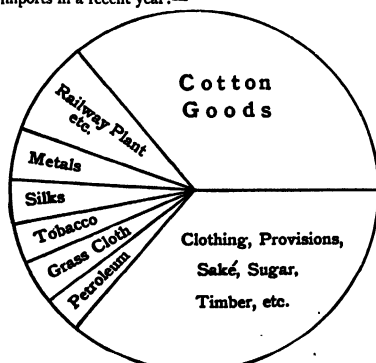
The following table shows the expenditure for a recent year:—

Heads.	Amount (in Yen).
Imperial Household	1,300,000
Council of State	69,686
Foreign affairs	204,021
Interior	960,856
Finance	2,170,349
Justice	1,379,617
War	46,250
Education	154,949
Public works	29,592
Communications	9,012
Extraordinary expenditure ...	1,643,050
Total	7,967,382
	(= about £800,000)

Commerce

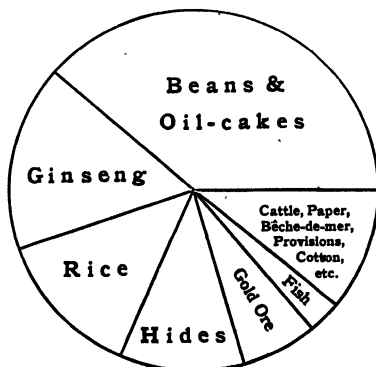
A. The Course of Trade

The following diagrams represent the value of imports and exports of merchandise respectively in each year from 1901 to 1905 inclusive:—

B. Imports

The following circle diagram shows the principal imports in a recent year:—

Principal Imports into Korea

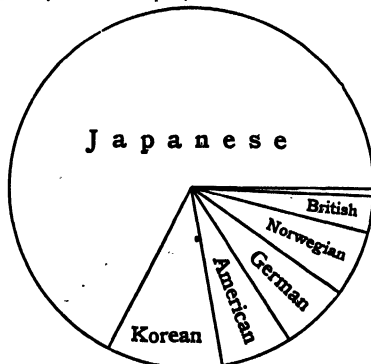
The principal commodities imported into Korea from the United Kingdom are cottons, iron, arms and ammunition, chemicals, and machinery. There are practically no direct exports from Korea to the United Kingdom.

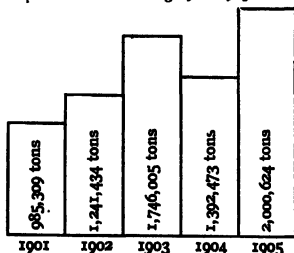
C. Exports

The following circle diagram shows the principal exports in a recent year:—

Principal Exports from Korea

The ginseng is taken chiefly by China, the rice and beans by the neighbouring countries.

Shipping

The following circle diagram shows the distribution among the leading flags of the tonnage entered in a recent year at all the open ports:—

Tonnage entered at Korean Ports according to Nationality

The following diagram shows the tonnage entered a the open ports of Korea during 1901–1905:—

Tonnage entered at Korean Ports during 1901–1905

Treaty Ports

Following is a list of all the treaty ports, with total tonnage entered at each in a recent year:—

Ports.	Date of Opening.	Tonnage Entered.
Fusan	1879 ...	754,000
Wonsan (Gensan)...	1880 ...	105,000
Chemulpo	1881 ...	584,000
Mokpo	1897 ...	200,000
Chinnampo ...	1897 ...	257,000
Kunsan	1899 ...	47,000
Masampo	1899 ...	33,000
Songchin	1899 ...	23,000

Other ports are: Syön-chyön-po, Wiju, and Yong-ampo.

Railways

Seoul—Chemulpo; 30 miles.
Seoul—Fusan; 300 miles.
Seoul—Songdo—Wiju; 300 miles.
Seoul—Wonsan.

Posts and Telegraphs

The following table gives some idea of the growth of the telegraph system:—

Years.	Length of Telegraph Lines (Miles).	No. of Telegrams.
1899	1540 ...	112,450
1902	2170 ...	209,418

Korea entered the Postal Union in 1900. Foreign correspondence is conducted mainly through Japanese post-offices in the capital and the chief ports.

THE JAPANESE EMPIRE

Area and Population

I.—*Japan Proper*

Divisions.	Area in Sq. Miles.	Pop. at Dec. 31, 1903.
Central Hondo[1]	36,575 ...	17,988,209
Northern Hondo	30,182 ...	7,075,500
Western Hondo	20,666 ...	10,396,284
Total Hondo ...	87,422 ...	35,459,993
Shikoku	7,026 ...	3,167,696
Kiushiu[2]	16,828 ...	7,260,834
Hokkaido (Yezo)[3]	36,273 ...	843,615
Total Japan proper...	147,549 ...	46,732,138

[1] Including the Bonin (Ogasawara) Islands.
[2] Including the Liu-kiu (Riu-kiu) Islands.
[3] Including the Kurile (Chishima) Islands.

II.—*The Japanese Empire*

Divisions.	Area in Sq. Miles.	Population.
Japan proper	147,549 ...	47,000,000
Formosa (Taiwan)... ...	13,494 ...	3,000,000
Pescadores (Hokoto) ...	85 ...	55,000
Total Japanese Empire	161,128 ...	50,055,000

Formosa and the Pescadores came into Japanese possession after the war with China in 1894–95. At the conclusion of the war of 1904–05 with Russia, Japan obtained the southern half of Saghalien or Karafuto (about 13,000 sq. miles) and the Port Arthur leased territory. The total area of the Japanese Empire (including Korea, annexed in 1910) is now about 260,000 square miles.

The population of Japan proper has increased from 36,700,118 in 1881 to 47,812,138 in 1905, an increase of nearly a third in less than a quarter of a century.

Population according to Class

Imperial Family	66
Kwazoku (nobles)	5,055
Shizoku (formerly Samurai, knights)...	2,167,389
Heimin (common people)	44,551,830

The imperial family is not included in the total population previously given.

Foreigners Resident in Japan

Chinese	9,411	Swiss	102
British	2,131	Dutch	90
Americans	1,585	Russians	45
Germans	634		
French	528	Total ...	14,708
Portuguese ...	182		

The number of Japanese resident abroad was nearly 150,000 at a recent date. About two-thirds of these were in the United States or its possessions, and nearly a quarter in Korea.

Religions

1. *Shintoism* (12 sects): 85,000 priests.
2. *Buddhism* (12 sects): 117,000 priests.
3. *Christianity* (*Roman Catholic, Greek, and Protestant*): 1500 licensed preachers.
4. *Shrines* dedicated to ancestors of the Emperor and to great subjects: 193,300.

Only the shrines receive any support from public funds.

Principal Towns

H = Hondo. Y = Yezo (Hokkaido). S = Shikoku.
K = Kiushiu. L = Liu-kiu.

Towns.	Population, Dec. 31, 1903.
Tokio (H, capital)	1,818,655
Osaka (H)	995,945
Kioto (H)	380,568
Yokohama (H)	326,035
Nagoya (H)...	288,639
Kobé (with Hiogo, H)	285,002
Nagasaki (K)	153,293
Hiroshima (H)	121,196
Sendai (H)	100,231
Kanazawa (H)	99,657
Hakodate (Y)	85,313
Okayama (H)	81,025
Otaru (Y)	79,361
Fukuoka (K)	71,047
Wakayama (H)	68,527
Sasebo (K)	68,344
Kuré (H)	66,006
Tokushima (S)	63,710
Kumamoto (K)	59,717
Niigata (H)	59,576
Kagoshima (K)	59,001
Toyama (H)	56,275

Towns.	Population, Dec. 31, 190-
Sapporo (Y)	55,304
Sakai (H)	54,040
Fukui (H)	50,155
Shidzuoka (H)	48,744
Shimonoseki (Akamagaseki, H) ...	46,285
Kofu (H)	44,188
Nafa (L)	43,132
Mayebashi (H)	41,714
Yamagata (H)	40,248
Gifu (H)	40,168
Otsu (H)	39,595
Moji (K)	38,065
Matsuyama (S)	37,842
Takamatsu (S)	37,430
Nagano (H)...	37,202
Mito (H)	36,928
Kokura (K)	36,825
Himeji (H)	36,509
Hirosaki (H)	36,443
Tsu (H)	36,108
Utsunomiya (H)	35,953
Kochi (S)	35,518
Takasaki (H)	35,226
Saga (K)	35,083
Matsuye (H)	35,081
Aomori (H)	34,857
Akita (H)	34,350
Nara (H)	33,735
Kurumé (K)...	33,273
Yonezawa (H)	33,063
Wakamatsu (H)	32,534
Morioka (H)	31,861
Takaoka (H)	31,119
Tottori (H)	31,023
Onomichi (H)	30,529
Yokkaichi (H)	30,140

Principal Towns of Formosa

Towns.	Population.
Taihoku (Taipeh; capital)	80,000
Tainan (former capital)	50,000
Tamsui...	—
Kelung...	—
Anping...	—
Takau	—

Climate

The following table gives particulars of temperature and rainfall for each of twenty-one stations of the empire:—

Stations.	Mean Temp. (° F.)	Max. Temp. (° F.)	Min. Temp. (° F.)	Total Rainfall (Inches).
Nemuro (43° 21′ N.)	41.5	86	.9	37.49
Sapporo (43° 4′)	45	88.5	-9.6	41.33
Hakodate (41° 46′)	46.8	89.4	-1.8	45.67
Akita (39° 42′)	50.4	91.2	3.9	68.43
Miyako (39° 38′)	50.5	90.9	11.5	59.43
Ishinomaki (38° 26′)	51.8	88.2	13.8	46.14
Nagano (36° 40′)	53.4	92.5	11.1	54.2
Kanazawa (36° 33′)	55.9	94.6	20.8	96.28

Stations.	Mean Temp. (° F.)	Max. Temp. (° F.)	Min. Temp. (° F.)	Total Rainfall (Inches).
Tokio (35° 41′)	57.2	93.2	20.5	57.24
Sakai (35° 33′)	57.7	96.1	22.6	77.91
Kioto (35° 1′)	57.6	95.2	16.2	69.04
Osaka (34° 40′)	58.8	96.4	25.7	52.52
Hiroshima (34° 23′)	58.8	94.1	24.6	71.11
Wakayama (34° 14′)	59.7	93.4	26.2	64.39
Akamagaseki (33° 59′)	59.4	93.7	24.4	55.81
Kochi (33° 33′)	60.4	94.5	22.3	109.81
Nagasaki (32° 44′)	58.3	94.6	25.4	71.07
Kagoshima (31° 35′)	62.6	94.1	24.4	76.72
Nafa (26° 13′)	72.5	92.1	46.9	92.73
Taipeh (25° 3′)	71.1	97	39.4	96.94
Henchung	76.5	91.8	53.6	113.56

January is the coldest month, August the hottest. At Tokio the average number of days per year with rain, snow, or hail is 146.5, with frost 68.3, with a clear sky 55.1, with thick fog 18, tempestuous 47.4.

Principal Islands

The Japanese Empire comprises over 600 islands, of which the following are the most important:—

Islands.	Area in Sq. Miles.	Population.
Hondo	86,374	33,000,000
Yezo	30,148	608,000
Kiushiu	13,779	6,285,000
Formosa (Taiwan)	13,429	2,800,000
Shikoku	6,861	3,014,000
Kuriles (Chishima)	6,159	2,200
Liu-kiu Islands	935	454,000
Sado	336	115,000
Tsushima	262	34,000
Awaji	218	195,000
Oki	130	36,000
Hokoto (Pescadores)	85	54,200
Iki	51	37,000
Bonin (Ogasawara) Islands	27	2,600

The population figures above are round numbers, and generally refer to the islands with their dependencies. This is not true of the area figures.

Principal Mountain Peaks

Peaks.	Height in Feet.
Kurile Islands—	
Cha-cha-nobori	7,900
Yezo—	
Tokachi-dake	8,200
Shribetsi-yama	7,874
Ishikari-dake	7,710
Sapporo-dake	6,500
Komaga-take	3,830
Hondo—	
Fuji-yama	12,395
Ontake	10,446
Norikura-dake	10,387
Shirane-san (in Kaiken)	10,330
Akaisi-yama	10,147
Yariga-dake	10,144
Orenge-yama	9,977
Komaga-take	9,842
Yakushi-dake	9,816
Yatsuga-dake	9,612
Tate-yama	9,186
Nantai-san	8,169
Asama-yama	8,136
Chokai-san	7,081
Kiushiu—	
Ichifusa-yama	7,200
Bakusi-dake	6,800
Aso-san	5,544
Kirisima-yama	5,528
Shikoku—	
Ishitsuchi-yama	7,743
Tsurugi-san	7,355
Formosa—	
Mt. Morrison (Niitake-yama)	14,270
Mt. Sylvia (Setsu-san)	12,480

Principal Rivers

Rivers.	Length in Miles.
Yezo—	
1. *To Sea of Japan:*	
Teshio	192
Ishikari	407 (?
2. *To Pacific Ocean:*	
Tokachi	120
Hondo—	
1. *To Sea of Japan:*	
Toshima	70
Mogami	151
Akano	97
Shinano	215
Imizu (Toyama Bay)	93
Jinzu (Toyama Bay)	93
Go (Iwame)	122
2. *To Pacific Ocean:*	
Kitakami (Sendai Bay)	146
Abukuma	122
Naga	102
Tone (Gulf of Tokio)	177
Sumida (Gulf of Tokio)	90
Ara (Gulf of Tokio)	104
Banyu	75
Fuji (Suruga Gulf)	85
Oi (Suruga Gulf)	112
Tenriu	136
Kiso (Mia Bay)	112
Yodo (Inland Sea)	70
Shikoku—	
Yosimo	149
Naka	168
Sendai	112
Kiushiu—	
Chikugo (Shimabara Gulf)	—
Kawachi	—
Formosa—	
Tamsui	—

Principal Lakes

Lakes are numerous in Japan, among the more noteworthy being:—Chiusenji (4375 feet above sea-level, 19½ miles round); Shoji (3160 feet high); Hakone (2428 feet high, 11¾ miles round); Omi (328 feet high, 180 miles round); Suwa (2624 feet high, 11 miles round); Inawashiro (33 miles round); Kasumiga (88 miles round); Kita (36½ miles round); Inba (29¾ miles round); Kawara (33½ miles round); Tawada (37½ miles round); Hachiro (36½ miles round); Nakano (39¾ miles round); Shinji (31¾ miles round); Saruma (49 miles round); Fure (36½ miles round); Shikotsu (27 miles round); and Toya (24½ miles round).

Population according to Occupation and Means of Livelihood

The following diagram shows the approximate distribution of the population according to occupation and means of livelihood:—

Agricultural	Artisan & Mercantile	Various Productive Industries	Professional	All others

Population of Japan according to Occupation and Means of Livelihood

Agriculture

The following table gives some particulars of the principal crops raised in Japan:—

Crops.	Area in Acres.	Annual Produce.
Rice	7,060,000 ...	190,000,000 bus.
Wheat	1,115,000 ...	18,000,000 ,,
Barley	1,642,000 ...	42,000,000 ,,
Rye	1,700,000 ...	32,000,000 ,,
Peas	1,142,000 ...	16,000,000 ,,
Millets	810,000 ...	14,000,000 ,,
Buckwheat	406,000 ...	4,700,000 ,,
Colza	385,000 ...	5,500,000 ,,
Potatoes and Sweet Potatoes	782,000 ...	2,800,000 tons
Cotton	51,000 ...	13,000 ,,
Hemp	42,000 ...	10,000 ,,
Tobacco	59,000 ...	30,000 ,,
Indigo	93,000 ...	55,000 ,,
Teas...	120,000 ...	56,000,000 lbs.
Sugar	—— ...	110,000,000 ,,

In a recent year Japan produced 21,500,000 lbs. of raw silk.

Live Stock

Japan has very few sheep, about 1,400,000 horses (mostly in North and Central Hondo and Kiushiu), and some 1,300,000 cattle (chiefly in West Hondo, Kiushiu, Formosa). Buffaloes are included among the cattle of Formosa.

Crops of Formosa

Formosa produces maize, millets, and other grain, peas, potatoes, tobacco, hemp, flax, and indigo, besides camphor, which is one of its leading products.

Minerals

The following table gives some particulars of the mineral production of Japan:—

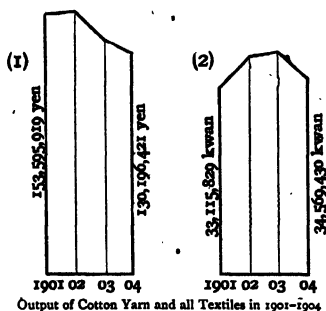
Minerals.	Annual Output.
Gold	88,750 ozs.
Silver	1,968,650 ,,
Copper	32,000 tons.
Iron (partly government mines)	38,000 ,,
Lead	1,780 ,,
Antimony	420 ,,
Coal (partly government mines; especially Kiushiu and Yezo)	10,600,000 ,,
Sulphur	25,000 ,,
Petroleum (chiefly Echigo, in Hondo, and Yezo)	43,000,000 gallons.
Manganese	4,300 tons.
Salt	——

Manufactures

The following table gives some particulars of the leading manufacturing industries of Japan:—

Industries.	Chief Seats.	Remarks.
Cotton-spinning	Osaka, Owari, Oyama, Tokio, Kioto, Hiogo, Nara, Okayama, Hiroshima, Nagasaki, Fukuoka, Kagoshima, &c.	76 mills, with 1,290,347 spindles, employing 70,326 persons in a recent year.
Cotton-weaving	Aitsi district, Osaka, Kioto.	— —
Silk goods ...	Hachioji, Kanazawa, Fukuoka.	——
Matches ...	Hiogo, Osaka, Aichi.	——
Bronzes... ...	Osaka, Toyama, Kioto, Niigata.	——
Straw-plait ...	Okayama, Aichi, Kagawa, Hiroshima.	——
Carpets	Sakai (near Osaka).	——
Iron	Wakamatsu.	Government foundry.
Mats and matting	Oita, Hiroshima, Okayama.	——
Beer	Sapporo.	——
Glass	Osaka, Yezo.	——
Paper	Kochi, Gifu, Ehime, Shizuoka, Tokio, &c.	——
Leather	Osaka.	——
Cutlery	Osaka.	——
Umbrellas ...	Osaka.	——
Furniture ...	Osaka.	——
Porcelain ware...	Aichi, Gifu, Kioto, Saga, Ishikawa, Kanazawa.	——
Saké (a brandy made from rice)	Osaka.	——
Soy (a sauce) ...	——	——
Small-arms ...	Kagoshima.	——
Lacquer-work ...	Ishikawa, Shizuoka, Wakayama, Fukushima, Kioto.	——

The following graphs show (1) the value of the output of silk, cotton, and other textiles for each year from 1901 to 1904 inclusive; (2) the quantity of cotton yarns produced in each of the above-mentioned years:—

Output of Cotton Yarn and all Textiles in 1901–1904

Currency

A. Money of Account

1 Yen = 100 Sen.
1 Sen = 10 Rin.

B. Coins and Notes

Coins.	Fineness.	Sterling Value. £	s.	d.
Gold—				
20 Yen	.9	2	0	11.63
10 Yen	.9	1	0	5.82
5 Yen	.9	0	10	2.91
Silver—				
50 Sen	.8	0	1	0.29
20 Sen	.8	0	0	4.92
10 Sen	.8	0	0	2.46
Nickel—				
5 Sen	—	0	0	1.23
Bronze—				
1 Sen	—	0	0	0.25
5 Rin	—	0	0	0.12

A yen represents 11.574 grains of pure gold.

The nickel coins are made of an alloy of 1 part nickel to 3 parts copper. The bronze alloy consists of 95 copper, 4 tin, and 1 zinc.

Gold was made the standard and the above system introduced in 1897. Gold is legal tender without limit; silver up to 10 yen; the other coins to 1 yen.

There are bank-notes for 10, 20, 50, 100, 500, and 1000 yen.

Weights and Measures

A. Linear Measure

1 Ri = 36 Chô.	1 Shaku = 10 Sun.
1 Chô = 60 Ken.	1 Sun = 10 Bu.
1 Ken = 6 Shaku.	1 Bu = 10 Rin.
1 Jô = 10 Shaku.	1 Rin = 10 Mo.

1 Mo = 10 Shi.

The standard *shaku* is equal to 11.93033472 inches, or .30 metre. The *ri* is about 2.44 miles.

B. Surface Measure

1 Chô = 10 Tan.
1 Tan = 10 Se.
1 Se = 30 Tsubo.
1 Tsubo = 36 Square Shaku.

The *chô* is equal to about 2.45 acres or almost exactly 1 hectare. The *tsubo*, which is the ordinary unit of land measurement, is equal to 3.954 square yards.

C. Cubic Measure

1 Koku = 10 To.	1 Go = 10 Shaku.
1 To = 10 Shoö.	1 Shaku = 10 Shô.
1 Shoo = 10 Go.	1 Shô = 10 Sai.

1 Sai = 10 Kei.

The *koku* is equal to 39.7 gallons or 4.96 bushels.

D. Weight

1 Hiyak-kin ... = 100 Kin.
1 Kwan ... ... = 1000 Momme.
1 Kin ... ... = 160 Momme.
1 Hiyaku-me ... = 100 Momme.
1 Momme ... = 10 Fun.
1 Fun ... ... = 10 Rin.
1 Rin ... ... = 10 Mo.
1 Mo ... ... = 10 Shi.

The *momme* is equal to 57.9719816 grains, and the *kwan* is equal to about 8.28 lbs. avoirdupois.

Finance

A. The Course of Finance

The following table shows the annual revenue and expenditure (in pounds sterling) for each financial year from 1902–03 to 1906–07:—

Financial Years.	Revenue. £	Expenditure. £
1902–03	30,353,600	29,525,230
1903–04	26,564,200	25,479,610
1904–05	33,428,920	28,282,770
1905–06	51,906,670	42,949,720
1906–07	50,501,110	50,501,110

B. Revenue

The revenue for a recent financial year is given in the following table:—

Sources.	Amount (in Yen).
Direct Taxation:	
Land tax	85,632,438
Income tax	21,837,334
Business tax	19,370,575
Indirect Taxation:	
Customs duties	31,787,165
Excise duties (saké, soy, &c.)	64,489,427
Stamp duties	27,408,831
Other Taxes	28,435,698
Net Profit of State Undertakings and Property (Posts and Telegraphs, Tobacco Monopoly, Railways, Forests, &c.)	104,699,937
Miscellaneous	8,871,072
Total Ordinary Revenue	392,532,477
Total Extraordinary Revenue	102,172,230
Total Revenue	494,704,707

The land tax is levied at the rate of 5 per cent on urban and 3⅓ per cent on rural lands, but the value taxed is that of 1873. The limit of exemption from income tax is 300 yen (£30) per annum. The rate of the tax for the lowest incomes is 1 per cent, and there is a graduated rate up to 5½ per cent on incomes of 100,000 yen (£10,200) and upwards. The business tax is levied on the sale of merchandise, banking, insurance, warehousing, manufacturing, printing, photography, transportation, and other such businesses.

C. Expenditure

The expenditure for a recent financial year is given in the following table:—

Heads.	Amount (in Yen). Ordinary.	Extraordinary.
Public Debt Charges	146,088,943	—
Imperial Household	3,000,000	—
Imperial Diet	1,507,872	—
Foreign Affairs	2,723,087	389,320
Interior	9,815,043	5,761,692
Finance	71,871,571	86,180,576
War	50,460,384	1,676,742
Navy	28,914,073	10,613,854
Justice	10,262,911	628,037
Public Instruction	5,000,351	1,693,837
Agriculture and Commerce	3,926,289	8,758,974
Communications	22,022,419	23,408,732
Totals	355,592,943	139,111,764
Total Expenditure	494,704,707	

The war expenditure in 1903–1906 amounted to 1,982,190,000 yen (=£202,350,000), and was covered thus:—

Taxation	212,872,902 yen
Loans, &c.	1,555,670,000 ,,
Surpluses	128,147,098 ,,
Miscellaneous	85,500,000 ,,

D. National Wealth

The following estimate for 1901 is given by Captain Brinkley in the *Encyclopædia Britannica*:—

Kinds of Wealth.	Amount (in Millions of Yen).
Value of Lands	3,600
,, Buildings	1,100
,, Household Furniture and Utensils	550
,, Cattle, Horses, Fowls, &c.	60
,, Railways	250
,, Mercantile Marine	33
,, Merchandise	430
Gold and Silver Bullion and Coin	250
Miscellaneous	2,000
Total	8,273 (= £844,500,000 roughly)

The same authority estimates the total annual national income as follows:—

Sources.	Amount (in Millions of Yen).
Produce of Agriculture, Forestry, and Fisheries	750
Produce of Mines	30
Manufactured Articles	400
Land-transport Earnings	90
Water-transport Earnings	15
House Rent	28
Profits on Foreign Trade	25
Banking Profits	27
Profits on Business	98
Total	1463 (= £149,350,000 roughly)

E. Public Debt

The following table gives the public debt of Japan at a recent date:—

Divisions.	Amount (in Yen).
Temporary Loans (mostly free of interest)	25,511,272
Internal Loans (5 to 7 per cent)	877,259,539
Foreign Loans (4 to 6 per cent)	970,410,310
Total	1,873,181,121 (= £191,220,573)

F. Budget of Formosa

The following table shows the revenue and expenditure of Formosa in a recent year:—

Revenue

Sources.	Amount (in Yen).
Yield of Public Works and Property	8,873,079
Other Ordinary Receipts	3,777,616
Imperial Subsidy	7,199,763
Other Extraordinary Receipts	5,556
Total	19,856,014

Expenditure

Heads.	Amount (in Yen).
Ordinary	13,245,073
Extraordinary	6,610,941
Total	19,856,014 (= £2,026,970)

The revenue and expenditure now amount to over £2,500,000 each.

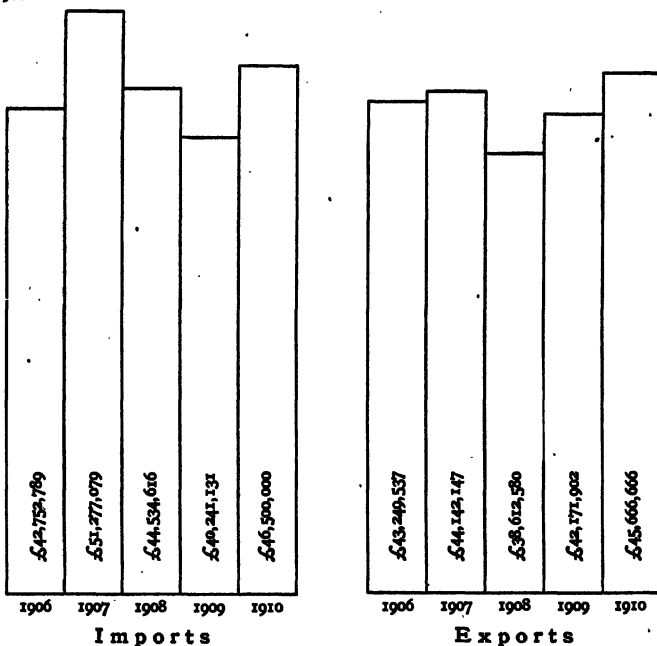
G. Local Finance

The actual revenue of the prefectures (*fu* and *ken*) for a recent year was 50,585,904 yen (= £5,164,000), and their expenditure was 46,800,925 yen (= £4,777,600).

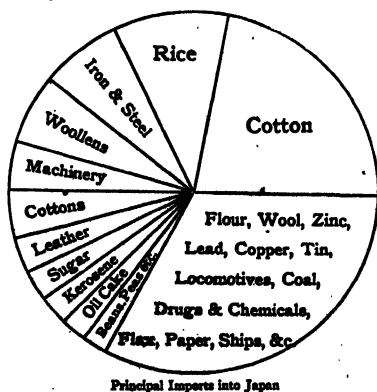
The actual revenue of the municipalities (*shi*), towns (*chō*), and villages (*son*) was 89,217,485 yen (= £9,107,600), and their expenditure 79,515,676 yen (= £8,117,300).

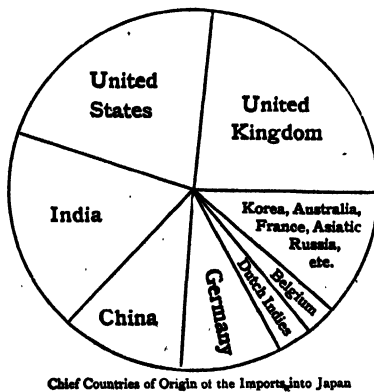
Commerce

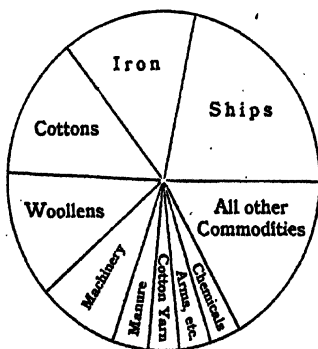
A. The Course of Trade

The following diagrams represent the value (in sterling) of the imports and exports of Japan in each year from 1906 to 1910 inclusive:—

B. Imports

The following circle diagram shows the relative importance of the principal commodities imported in a recent year:—

Principal Imports into Japan

The following circle diagram shows the relative importance of the chief countries as sources of supply of the imports of Japan in a recent year:—

Chief Countries of Origin of the Imports into Japan

The following diagram shows the countries of origin of each of the chief commodities imported in a recent year:—

Countries of Origin of the Chief Imports into Japan

Principal Exports from the United Kingdom to Japan

The above circle diagram shows the distribution of the total value imported from the United Kingdom to Japan in a recent year among the principal commodities concerned.

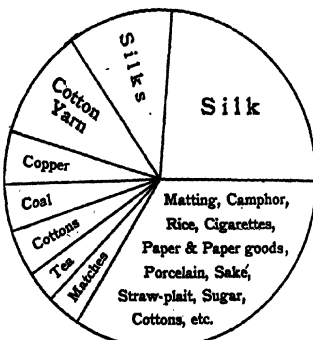
The total value of British exports to Japan was as follows in a number of recent years:—

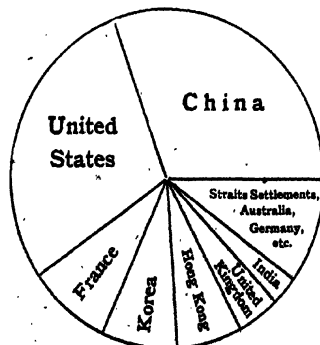
	£
1905	9,661,896
1906	12,907,675
1907	12,062,417
1908	9,904,465
1909	8,353,252

The export of shipping in 1906 was abnormally large.

The value of the imports of Formosa in a recent year was about £2,900,000, fully half being received from Japan, the rest chiefly from China, the United Kingdom, and the United States.

C. Exports

The following circle diagram shows the relative importance of the chief exports in a recent year:—

Principal Exports from Japan

The following circle diagram shows the relative importance of the chief countries as receivers of Japanese goods in a recent year:—

Principal Destinations of the Japanese Exports

The following diagram shows the chief countries of destination of the principal exports:—

Export	Destinations
Silk	United States; France; Italy etc.
Silk Goods	Mostly to France: then comes United States.
Cotton yarn	China; Korea; Hong Kong & Philippines
Coal	China; Hong-Kong; India; Russia, etc.
Tea	United States; Canada; Russia, China, etc.
Copper	Hong - Kong; China; Germany; France, India, etc.
Matches	China, Korea, India, & other Asiatic Countries.
Mats	United States; Canada, etc.
Rice	Hong-Kong; United Kingdom; United States; Australia; Germany; Russian Asia, Egypt, France etc.

Destination of the Principal Exports of Japan

Imports into United Kingdom from Japan

The above circle diagram shows the distribution of the total value imported into the United Kingdom from Japan among the principal commodities concerned, according to the returns of a recent year.

The total value of British imports from Japan was as follows in a number of recent years:—

Year	£
1905	1,972,450
1906	3,048,889
1907	3,307,790
1908	2,992,685
1909	3,700,639

The total value of the exports of Formosa in a recent year was about £2,860,000, comprising chiefly tea, rice, sugar, camphor, and camphor oil. About two-thirds the value of exports was sent to Japan, the rest mostly to China and the United States.

Shipping

The following diagram shows the tonnage of shipping entered at all the Japanese ports in each of the years from 1905 to 1909 inclusive:—

Tonnage of Shipping entered at Japanese Ports.

The following circle diagram shows the distribution of the tonnage entered in a recent year according to nationality:—

Nationality of Shipping entered at Japanese Ports

The following diagram shows the percentage distribution of shipping according to nationality in 1898, 1902, and 1905:—

British 50.2	Japanese 26.1	German 8.7	U.S. 4	Others
British 35.1	Japanese 37.8	German 10.8	U.S.A.	Others
British 47.1	Japanese 12.7	German 13.5	U.S.A. 12.9	Others

Percentage Distribution among the Chief Flags of Tonnage entered at Japanese Ports in 1898, 1902, and 1905

Ports

The following table gives the imports, exports, and shipping of the principal ports for a recent year:—

	Ports.	Imports. £	Exports. £	Tonnage Entered.
Yezo.	Hakodate...	167,000	320,000	121,000
	Otaru ...	27,000	390,000	145,000
	Muroran ...	——	123,000	271,000
Hondo.	Yokohama	15,218,000	20,504,000	3,263,000
	Niigata ...	——	——	——
	Shimizu ...	——	——	——
	Taketoyo...	——	——	——
	Kobé ...	23,338,000	8,622,000	4,859,000
	Osaka ...	1,889,000	5,711,000	400,000
	Shimonoseki } Moji ... }	1,791,000	1,677,000	8,415,000
Kiushiu.	Nagasaki ...	1,996,000	440,000	1,798,000
	Karatsu ...	2,000	157,000	240,000
	Kuchinotsu	26,000	489,000	699,000

Other ports are: in Hondo, Tsuruga, Yokkaichi, and Aomori; in Kiushiu, Hakata and Sasebo; in Yezo, Kushiro.

PORTS OF FORMOSA

The following table gives particulars of the trade and shipping of the chief ports of Formosa for a recent year:—

Ports.	Imports. £	Exports. £	Tonnage Entered.
Tamsui ...	866,000 ...	592,000 ...	107,000
Kelung ...	1,188,000 ...	885,000 ...	91,000

Other ports are: Anping, Takow, Kiukong, Lukong, Oulong, Tokaku, Toko, Toseki, and Hokkokei. Makung is the port of the Pescadores.

Railways

Following are railway statistics for the Japanese Empire in a recent year:—

	Length in Miles.	Number of Passengers.
State railways ...	1766 ...	32,472,000
Private „ ...	3248 ...	82,649,000
Total ...	5014 ...	115,121,000

PRINCIPAL LINES

HONDO—
From Shimonoseki throughout the whole length of the island to Aomori, with branches at several places.

YEZO—
Hakodate—Otaru—Sapporo; Nemuro—Soya; Muroran to the preceding.

SHIKOKU—
Tokushima—Matsuyama—Kochi—Tokushima.

KIUSHIU—
Nagasaki—Sasebo; Sasebo—Karatsu—Fukuoka—Moji; Sasebo—Saka—Hakata; Moji—Miyasaki; Kagoshima—Kumamoto—Fukuoka.

FORMOSA—
Takow—Tainan—Kagee—Taiwan—Taihoku—Kelung; Tamsui—Daidotei (Twatutia).

Post Office and Telegraphs

The following table shows the business of the post-office during the period 1898–99 to 1905–06:—

Year.	Number of Letters, Newspapers, Books, Parcels, &c.
1898–99	610,258,473
1899–1900	627,486,193
1900–01	758,885,503
1901–02	830,865,767
1902–03	913,114,375
1903–04	929,286,136
1904–05	1,102,705,484
1905–06	1,267,716,692

The length of telegraph line is 16,700 miles, with 86,000 miles of wire; the number of telegrams delivered annually exceeds 23,000,000; the length of submarine cable is 2241 miles, with over 3000 miles of wire. There are some 3400 miles of telephone, with 46,000 miles of wire.

Defence

A. THE ARMY

The following shows the strength of the military forces at a recent date:—

	Numbers.
Administrative staff	10,946
Imperial Guard	14,209
The twelve divisions	130,047
Formosan garrison	16,387
Gendarmerie	2,624
Students	3,010
Total active	176,323
Reserve	204,109
Territorial Army (Landwehr) ...	98,722
Depôts (recruiting reserve)	161,547
Grand total	640,741

The present strength of the army on a war footing is, without the various reserves, about 200,000.

The head-quarters of the Imperial Guard and the twelve divisions, each under a lieutenant-general, are as follows:—Guard, Tokio; 1st division, Tokio; 2nd div., Sendai; 3rd div., Nagoya; 4th div., Osaka; 5th div., Hiroshima; 6th div., Kumamoto; 7th div., Sapporo; 8th div., Hirosaki; 9th div., Kanazawa; 10th div., Himeji; 11th div., Marugamé; 12th div., Kokura.

B. The Navy

The following shows the present strength of the Japanese navy according to the *Statesman's Year-Book.*

Kind of Vessels.	Number (including those building).
Modern Battleships	12
Other "	6
Armoured Cruisers	11
Other "	17
Torpedo Gunboats	3
Destroyers	48
Torpedo Boats (modern)	47

The personnel of the navy numbers over 36,000.

Administration

A. Central Administration

The Emperor (*Tenno*), known abroad as the *Mikado*; at present *Mutsuhito* (born 1852), ascended the throne 1867. Succession has been legally settled on male descendants (1889).

Imperial Diet (created by Emperor in 1889).

(a) *House of Peers*: includes (1) male members of Imperial family of full age; (2) princes and marquises at least 25 years old; (3) counts, viscounts, and barons at least 25 years old who have been elected by their orders, not more than a fifth of each order; (4) persons above 30 years old nominated by the Emperor; (5) a number of persons, at least 30 years old, elected by the 15 most highly taxed male inhabitants in each fu and ken. Membership under (3) and (5) is for seven years. Number under (4) and (5) must be not more than half of whole. Total number about 364.

(b) *House of Representatives*: 379 members elected by secret ballot by the qualified electorate.

The Cabinet or Ministry: consisting of a President, and Ministers for the Interior, Foreign Affairs, Finance, Justice, War, Navy, Public Instruction, Agriculture and Commerce, Communications.

B. Local Government

Except Yezo and Formosa, the Empire is divided into *Fu* and *Ken*, these subdivided into *Shi* (municipalities) and *Gun* (counties), the latter again into *Chō* (towns) and *Son* (villages). Yezo has a governor and a special government. Formosa is under a governor-general.

Education

The following table gives the principal educational statistics for a recent year:—

Schools.	Number.	Staff.	Pupils.
Elementary Schools	27,383 ...	105,301 ...	5,154,113
Middle "	268 ...	4,902 ...	101,821
High "	8 ...	286 ...	4,904
High Girls' "	96 ...	1,495 ...	29,134
Normal "	64 ...	1,104 ...	19,404
Higher Normal "	3 ...	168 ...	1,321
Special and Technical "	2,019 ...	5,520 ...	139,994
Various "	1,922 ...	6,241 ...	122,139
Universities... ...	2 ...	410 ...	5,851
Kindergarten ...	295 ...	783 ...	26,092

The universities are at Tokio and Kioto. Formosa has a separate educational system.

ASIATIC RUSSIA

Area and Population

Governments and Provinces.		Area in Sq. Miles.	Population, 1897.
Western Siberia	Tobolsk (Govt.)	539,510	1,438,484
	Tomsk (Govt.)	331,070	1,929,092
Irkutsk (Eastern Siberia)	Irkutsk (Govt.)	434,210	540,535
	Yeniseisk (Govt.)	986,910	559,902
	Yakutsk (Prov.)	1,385,740	227,713
Amur	Amur (Prov.)	172,800	120,306
	Transbaikalia (Prov.)	236,800	664,071
	Maritime Province	715,780	223,336
	Saghalien District	16,600	12,250
	Total Siberia	4,819,420	5,715,689
The Steppes	Akmolinsk (Prov.)	229,545	678,957
	Semipalatinsk (Prov.)	184,580	685,197
	Uralsk (Prov.)	139,130	644,001
	Turgai (Prov.)	176,170	453,123
Turkestan	Semiretchinsk (Prov.)	152,240	990,107
	Sir-Daria (Prov.)	194,800	1,479,848
	Ferghana (Prov.)	53,550	1,560,411
	Samarkand (Prov.)	26,620	857,847
	Transcaspian Province	214,175	372,193
Vassal States	Bokhara	80,000	1,250,000
	Khiva	23,200	800,000
	Sea of Aral	26,160	—
	Caspian Sea	169,340	—
	Total Asiatic Russia	6,488,930	15,487,373

The war with Japan deprived Russia of Port Arthur and its dependent territory, and of southern Saghalien.

Population according to Race

Races.	Approximate Numbers.
MONGOLIC—	
Kalmucks (Tomsk, Semipalatinsk, Semiretchinsk, &c.)	90,000
Buriats (Irkutsk, Transbaikalia)	280,000
MANCHU—	
Tunguses (Eastern Siberia)	80,000
FINNIC—	
Samoyedes (N. coast west of Khatanga)	20,000
Ostyaks (Obi basin)	27,000
Soyotes (Upper Yenisei)	1,000
Voguls (eastern slopes of Urals)	9,000
TURKI—	
Yakuts (chiefly Lena basin)	250,000
Usbegs (Bokhara, Khiva, Samarkand, &c.)	1,800,000
Kara-Kalpaks (chiefly near Aral Sea)	100,000
Kirghizes (Steppes, &c.)	3,500,000
Kara-Kirghizes (Thian-Shan and Pamir region)	400,000
Bashkirs (Uralsk)	—
Turkomans (Transcaspia chiefly)	500,000
SUB-ARCTIC (HYPERBOREAN)—	
Chukchis (N.E. Siberian Peninsula)	15,000
Koriaks (Maritime Province)	5,000
Kamchadales (Kamchatka Peninsula)	4,000
Giliaks (Lower Amur)	8,000
Yukaghirs (Yana-Kolima region)	500
IRANIAN—	
Tajiks and Sarts (Khiva, Bokhara, &c.)	800,000
OTHER RACES—	
Russians	6,500,000
Poles	1,200,000
Jews	15,000
Arabs	10,000
Manchus	20,000
Ainus	3,000
Chinese	15,000
Japanese	6,000
Koreans	20,000
Persians, Hindus, &c.	—

Principal Towns

Towns.	Population, 1897.
Tashkend (cap. Sir-Daria and Turkestan)	156,414
Khokand (cap. Ferghana)	82,054
Bokhara (cap. Bokhara)	70,000 (est.)
Namangan (Ferghana)	61,906
Samarkand (cap. Samarkand)	54,900
Tomsk[1] (cap. Tomsk)	52,430
Irkutsk (cap. Irkutsk gov. and gen.-govt.)	51,434
Karshi (Bokhara)	50,000 (est.)
Andijan (Ferghana)	46,680
Omsk (cap. Akmolinsk and Steppes)	37,470
Uralsk (cap. Uralsk)	36,597
Old Margelan (Ferghana)	36,592
Osh (Ferghana)	36,474
Blagovestchensk (cap. Amur)	32,834
Khojent (Samarkand)	30,076
Charjui (Bokhara)	30,000 (est.)
Tiumen (Tobolsk)	29,588
Barnaul (Tomsk)	29,408
Vladivostok (cap. Maritime Prov.)	28,896
Krasnoiarsk (cap. Yeniseisk)	26,600
Semipalatinsk (cap. Semipalatinsk)	26,353
Vernoye (cap. Semiretchinsk)	22,982
Ura-tyube (Samarkand)	20,837
Tobolsk (cap. Tobolsk)	20,427
Petropaulovsk (Akmolinsk)	20,014
Askabad (cap. Transcaspia)	19,428
Biisk (Tomsk)	17,206
Jisak (Samarkand)	16,041
Khabarovsk (Maritime Prov.; cap. Amur gen.-govt.)	14,932
Auleata (Sir-Daria)	12,006
Yeniseisk (Yeniseisk)	11,739
Kolyvan (Tomsk)	11,703
Chita (cap. Transbaikalia)	11,480
Hissar (Bokhara)	11,000 (est.)
Kurgan (Tobolsk)	10,579
Minussinsk (Yeniseisk)	10,255

Other capitals are: Yakutsk (Yakutsk) and Khiva (Khiva).

[1] Seat of a university.

Climate

The following table gives particulars of temperature and rainfall for twenty-five stations:—

Stations.	Latitude (N.).	Height above Sea-level (Ft.).	Mean Annual Temp. (° F.).	Coldest Month, Temp. (° F.).	Warmest Month, Temp. (° F.).	Precipitation (Inches).
Samarkand	39° 39′	2400	59.5	34.7	82.4	14.63
Ura-tyube	39° 55′	985	53.8	37.9	78.8	—
Jisak	40° 7′	970	58.5	27.1	81.1	26.36
Khojent	40° 17′	1080	59.7	30.9	84.9	15.76
Tashkend	41° 19′	1610	56.7	30	80.6	12.91
Auleata	42° 53′	2120	49.5	23	70.9	9.56
Vladivostok	43° 9′	100	40.3	5	69.4	13.10
Perovsk	44° 50′	—	46.2	11.8	78.1	4.37
Kazalinsk	45° 45′	165	45.5	11.5	77.2	7.8
Blagovestchensk	50° 15′	560	29.8	−16.6	70	—
Semipalatinsk	50° 24′	590	37	1.6	72.5	7.68
Akmolinsk	51° 12′	1025	35.6	0	69.1	9.17
Nerchinsk	51° 19′	2170	25.3	−20.9	64.9	16.07
Irkutsk	52° 17′	1510	31.8	−4.9	65.8	16.31
Petropaulovsk	53° 0′	35	36.1	14	58.6	—
Nikolaievsk	53° 8′	65	27.5	−9.2	61.5	16.11
Barnaul	53° 20′	460	32.7	−2.9	67.3	10.02
Tomsk	56° 29′	300	30.4	−2.6	65.3	14.98
Tobolsk	58° 12′	360	32.4	−3.5	68	18.45
Yeniseisk	58° 27′	315	28	−13.5	68	15.33
Okhotsk	59° 21′	65	23	−9.8	54.7	7.45
Yakutsk	62° 1′	525	11.8	−45	65.8	13.57
Turukhansk	65° 55′	65	20.1	−14	60.1	17.82
Verkhoyansk	67° 34′	165	1.9	−56.2	59.7	—
Ustyansk	70° 55′	50	2.8	−38.7	60.8	—

The coldest months and those of least precipitation are generally January and February; the warmest and wettest, July and August.

Principal Mountain Systems

Ranges.	Highest Summits.	Height in Feet.
Ural Mountains (frontier)	Telpos-iz	5,540
Mugojar Mts.	Airuk	1,970
Thian-Shan System—		
Hissar Mts.	Hazreti-Sultan	14,500
Alai Mts.	——	19,000
Trans-Alai Mts.	Kaufmann	25,000
Kara-tau	Min-jilke	7,000
Talas-tau	Kara-bura	11,000
Alexander Mts.	Semenov	15,750
Terskei Ala-tau	Ugas-bas	17,750
Kungei Ala-tau	——	—
Transilian Ala-tau	Talgarnyn	15,350
Kizil-Art (E. Pamir; frontier)	Tagharma (in Chinese Turkestan)	25,800
Thian-Shan proper (frontier)	Khan-tengri	24,000
Zungarian Ala-tau (frontier)	——	11,500
Tarbagatai Mountains (frontier)	Mus-tau	11,320
	Tas-tau	9,850
Altai System—		
Altai Mts. proper (frontier)	Byelukha	14,900
Sayan Mts. (frontier)	Munku-Sardik	11,500
Kusnezky Ala-tau (with Abakan Mts.)	Taskül	5,470
Baikal Mountains	——	7,500
Yablonoi Mountains	Sokhondo	8,000
Stanovoi Mountains	——	8,000
Mountains of Kamchatka	Klyuchevskaya Sopka	15,672
Khara-ulakh and associated ranges.		
Lower Amur Valley—		
Little Khingan (Bureya)	Logar-aul	3,450
Sikhota-alin	Golaya	5,550
Saghalien Mountains	Tiara	5,000
Central Siberian Groups—		
Byrranga Mts.	——	—
Syverma Mts.	——	—
Pit Mts.	——	—
Lin Mts.	——	—
Transcaspian Ranges—		
Little Balkans	——	—
Kopet-dagh (Daman-i-koh)	——	8,000

Principal Rivers

Rivers.			Length in Miles.
A. FLOWING INTO ARCTIC OCEAN—			
Kara (Kara Bay; frontier)			165
Obi (Gulf of Obi)			3250
Vasyugan		Left	530
Irtish		Left	2310
Ishim	Left	Left	1490
Tobol	Left	Left	800
Konda	Left	Left	375
Om	Right	Left	435
Tara	Right	Left	195
Demyanka	Right	Left	140
Sosva		Left	430
Sygva (left)		Left	150
Chumysh		Right	415
Inia		Right	280
Tom		Right	525
Chulym		Right	980
Ket		Right	680
Vakh		Right	500
Taz (Taz Bay)			830
Yenisei			2500
Sym		Left	270
Yeloguy		Left	—
Turukhan		Left	220
Upper Tunguska (Angara)		Right	1770
Pit		Right	190
Stony Tunguska		Right	800
Lower Tunguska		Right	1680
Pyasina			350
Taimyr (Taimyr Bay)			250
Khatanga (Khatanga Bay)			460
Anabara			—
Olenek			1250
Lena			2850
Peleduy		Left	300
Vilyuy		Left	1300
Kirenga		Right	300
Chuya		Right	200
Vitim		Right	1100
Olekma		Right	930
Aldan		Right	1370
Yana (Yana Bay)			750
Indigirka			950
Kolima			1000
Omolon (right)			500

Rivers.	Length in Miles.
B. Flowing into Behring Sea—	
Anadyr (Gulf of Anadyr)	450
Kamchatka	300
C. Flowing into Sea of Okhotsk—	
Okhota	200
Amur (frontier)	2750
Zeya (Left)	720
Bureya (Left)	480
Ussuri (frontier; right)	550
D. Flowing into Caspian Sea—	
Ural (frontier)	1335
Ilek (left)	265
Emba	280
Atrek (frontier)	250
E. Flowing into Aral Sea—	
Sir-Daria (Jaxartes)	1780
Amu-Daria (Oxus; frontier)	1380
F. Flowing into Lake Balkash—	
Ili	1000
Karatal	200
Ak-su	200
Lepsa	200
G. Running Dry in Turkestan Sands—	
Tejend (Lower Heri-rud)	650
Murgh-ab	400
Zarafshan	450
Talas	200
Chu	570
Sary-su	500
H. Flowing into Lake Baikal—	
Selenga	750
Orkhon (Right)	450
Chikoi (Right)	300
Khilok (Right)	300
Uda (Right)	150
Barguzin	200

Principal Drainage Basins

Basins.	Area in Sq. Miles.	Basins.	Area in Sq. Miles.
Obi	1,125,000	Amur	776,000
Yenisei-Selenga	970,000	Caspian Sea	800,000
Lena	896,000	Aral Sea	282,000

Principal Lakes

Lakes.	Area in Sq. Miles.	Lakes.	Area in Sq. Miles.
Caspian Sea	169,340	Issik-kul	2570
Aral Sea	26,160	Saisan	920
Baikal	13,200	Ala-kul	790
Balkash	7,120	Sassik-kul	190

Plains and Plateaus

I. Plateaus—

(*a*) The Pamir (Ferghana); 12,000 ft. above sea-level.

(*b*) Ust-Urt Plateau (between Caspian and Aral); 600–1000 ft.

II. Deserts of the Aralo-Caspian Depression—

(*a*) Kara-Kum (Black Sands); N.E. of Aral Sea.

(*b*) Kizil-Kum (Red Sands); between Amu-Daria and Sir-Daria.

(*c*) Turkoman Desert (also Khwarezm and Kara-Kum); Khiva and Transcaspian Province.

(*d*) Ak-Kum (White Sands); between Chui River and Alexander Mountains.

III. The Steppes—

(*a*) Kirghiz Steppes; from Volga east to Semipalatinsk.

(*b*) Steppe of Bed-pak-dala; southern Akmolinsk.

(*c*) Baraba Steppe; in Tobolsk and Tomsk, east of Upper Irtish.

(*d*) Vasyugan Steppe; in Tomsk, west of Obi, in Vasyugan basin.

(*e*) Kulunda Steppe; in Tomsk, about head-waters of Obi.

(*f*) Ishim Steppe; basin of Ishim in Tobolsk

IV. The Tundras—

Lower Yenisei westwards into Europe.

Agriculture

The following table gives approximately, according to Kaufmann's estimate in the *Russian Encyclopædic Dictionary* (1900), the cultivated area and the area under crops in Siberia:—

Provinces.	Cultivated Area Acres.	Area under Crops. Acres.
Tobolsk	5,670,000	3,270,000
Tomsk	8,647,000	5,259,000
Yeniseisk	1,830,000	977,000
Irkutsk	1,800,000	910,000
Transbaikalia	1,415,000	872,000
Yakutsk	81,000	43,000
Amur (Russians)	143,000	143,000
South Ussuri (peasants only)	151,000	151,000
Total	19,737,000	11,625,000

The following table gives, according to official returns, the yield of the principal crops in Siberia and the Steppes in a recent year:—

Crops.	Produce (thousands of cwts.). Siberia.	The Steppes.
Wheat	22,690	13,638
Rye	14,003	345
Oats	20,165	4,075
Barley	2,125	1,346
Other Grains	1,668	4,529
Potatoes	8,734	1,309
Hay	126,382	63,013

The area under cotton in Turkestan is about 532,000 acres (mostly in Ferghana); the produce is about 950,000 cwts. of raw cotton. The cotton output of Khiva and Bokhara is about 630,000 cwts. Turkestan also produces 2,670,000 cwts. of rice and a considerable amount of silk annually. Various cereals, sesamum, flax, vines, tobacco, and numerous fruits are among the remaining crops.

Live Stock

The following table gives the estimated numbers of live stock in Siberia, according to Kaufmann:—

Provinces.	Horses.	Cattle.	Sheep and Goats.	Pigs.	Reindeer.
Tobolsk	736,230	985,520	1,097,810	226,520	186,460
Tomsk	2,307,740	1,919,890	3,694,690	535,330	—
Yeniseisk	470,750	297,740	590,000	52,000	—
Irkutsk (incomplete) ...	234,490	314,610	322,170	62,630	—
Transbaikalia	628,290	1,405,110	1,379,430	138,760	—
Yakutsk	117,230	213,400	360	—	19,960
Amur (Russians only) ...	22,190	25,520	3,680	—	—
Ussuri (peasants only) ...	10,680	32,610	13,790	—	—
Totals	4,527,600	5,194,400	7,101,930	1,015,240	206,420

Central Asia has also large numbers of horses (Kirghiz and Turkmenian), camels, cattle, coarse-woolled sheep, goats, yaks, asses, &c.

Forests

The following table gives the approximate forest area of Asiatic Russia:—

Divisions.	Area of Forests (in Acres).
Siberia	337,000,000
Amur Region	288,280,000
Turkestan	4,066,000
Other parts	2,809,000
Total	632,155,000

The chief trees of the Siberian forests are fir, pine, Siberian cedar (a pine), birch, larch, aspen, and lime (in the west).

Minerals

Minerals.	Localities.
Gold	W. Siberia; Olekminsk (Yakutsk); Amur, Maritime Province, Nerchinsk (Transbaikalia).
Silver... ...	Altai circuit (W. Siberia); Nerchinsk; Steppes.
Lead	Steppes; Nerchinsk; Altai; Turkestan.
Copper ...	Altai circuit; Steppes; Turkestan.
Iron	Kusnetsk (Tomsk) and elsewhere.
Tin	Onon valley (Transbaikalia).
Nickel ...	Transbaikalia.
Coal (including lignite) ...	Kusnetsk and Chulym (W. Siberia); Ekibaztusk, &c., in Semipalatinsk; Cheremhov (Irkutsk); Saghalien (especially Dui); Maritime Prov. (south); Turkestan (Samarkand), &c.
Naphtha ...	Cheleken Island and elsewhere in Transcaspia; Ferghana; Uralsk and Turgai; Saghalien.
Asphalt ...	Turkestan (esp. Ferghana).
Ozokerite ...	Cheleken Island; Ferghana, Khiva; Lake Baikal.
Salt	W. Siberia (lakes in Tomsk); Cheleken Island; E. Siberia; Semipalatinsk.
Glauber Salt...	E. and W. Siberia.
Sulphur ...	Transcaspian Province.
Graphite ...	Aliber (Irkutsk).
Fossil Ivory ...	Arctic Siberia (esp. mouth of Lena).

There also occur in Asiatic Russia—porcelain, lime-stone, granite, amber, gypsum, nitre, precious stones, &c.

Following are a few figures of the output in recent years:—Gold from Siberia, 30,070 kilograms; silver from Altai and Nerchinsk, 2737 kilograms, from Semipalatinsk, 1384 kilos; pig-iron in Siberia, 3200 tons; coal from Siberia, 559,000 tons, from Turkestan, 11,500 tons; salt from Siberia, 90,385 tons, from Transcaspian province, 17,900 tons.

The number of persons engaged in making and working metals in Siberia and Turkestan in 1901 was 7575.

Manufactures

I. Siberia—

Distilleries, iron-works, dairying (W. Siberia), dairy utensils and machinery, tallow, leather-dressing, cutting of precious stones (especially Kolyvan), flour-grinding, candles, soap, carpets (Tiumen), felt boots, glass-works (Tomsk and Irkutsk), linens (Tiumen), gloves (Tiumen), paper, wire-sieves, sledges, and similar articles (Tomsk), &c.

II. Central Asia—

Cottons, woollens, silks, carpets, saddles, leather, bricks, cotton-washing, weapons, oil-making, distilling, &c.

The following table shows the number of manufactories in Siberia and Turkestan, with some particulars concerning them, in 1893. Only works with a yearly output of more than 1000 roubles (nearly £106) are taken into account.

Divisions.	Number of Manufactories.	Number Employed.	Value of Annual Output.
Siberia ...	609	12,017	£1,261,000
Turkestan ...	359	6,295	£1,711,000
	968	18,312	£2,972,000

The above return cannot be regarded as complete. The number of manufactories in Siberia in 1897 is given as 4651, employing 25,200 people, and producing to the value of about £2,120,000.

Currency

The coinage of Bokhara, Khokand, and Khiva consists of gold *tillahs* and silver *tangas*, but Russian money is also in use throughout Central Asia and in Siberia.

The Bokhara tillah is worth from 11*s.* to 13*s.*; that of Khokand, about 9*s.*; and that of Khiva, about 8*s.* 6*d.* The tanga is valued at about 5*d.*

Weights and Measures

Russian weights and measures are in use in Central Asia and Siberia.

Centres of Inland Trade

I. SIBERIA—

Has about 600 fairs, with a total business of £5,000,000.

Among the fairs and markets are those of:

Ishim (cattle, tallow, butter, hides, &c.); Berezov; Obdorsk; Tiumen (hides and skins, bristles, salt, pressed tea, fish, &c.); Tomsk; Yakutsk (furs, whalebone, tea, Chinese goods, &c.); Chertkovkinsky, in Transbaikalia (fish chiefly); Evgashchinskoie, in Tobolsk (cattle, meat, tallow, dairy produce, &c.); Irkutsk (cattle, meat, tallow, &c.); Tobolsk (leather, bristles, horsehair, furs, &c.); Krasnoiarsk (as last; also fish); Kiakhta (trade across frontier with Maimachin in Chinese Empire). The great fair at Irbit in the government of Perm may be also mentioned here.

II. CENTRAL ASIA—

Total business about £3,500,000.

The chief trade centres are:

Akmolinsk, Atbassar, Petropaulovsk (hides and skins, horse-hair, &c.); Karkaralinska, Kujianda (in Semipalatinsk), New Margelan (cotton especially); Uralsk (cattle, meat, tallow, &c.); Semipalatinsk (leather, bristles, horse-hair, furs, hides and skins, &c.). Samarkand is the chief centre of the trade by the railway.

Internal Communications

I. RAILWAYS—

(*a*) Siberian Railway:

1. *West Siberian Railway*: Chelyabinsk-Omsk (opened 1894), 494 miles; Omsk-Ob River (opened 1896), 388 miles.
2. *Central Siberian Railway*: Ob-Krasnoiarsk, with branch to Tomsk (opened 1898), 528 miles; Krasnoiarsk-Irkutsk, 668 miles.
3. *Baikal Section*: Irkutsk-Myssovaya, 193 miles.
4. *Transbaikal Railway*: Myssovaya-Stryetensk (opened 1900), 691 miles.
5. *Amur Railway*: Stryetensk-Khabarovsk (not yet built), 1325 miles.
6. *Ussuri Railway*: Khabarovsk-Vladivostok (opened 1897), 708 miles.
7. *Manchurian Railway*: From Section 4 to Nikolskoye on Section 6; branch from Harbin to Port Arthur and Dalny; total length, 1272 miles.

Total length of the Siberian Railway, 6267 miles; time from Chelyabinsk to Vladivostok, 7 days.

Krasnovodsk on Caspian Sea (steamer communi-

(*b*) Central Asian (Transcaspian) Railway:

cation with Petrovsk, &c.) to Merv, Samarkand, Tashkend, and Andijan.

Total length, 1510 miles; begun in 1880, completed as above in 1900.

(*c*) Turkestan or Steppe Railway:

Tashkend to Orenburg.

Total length, about 1150 miles.

Grand total of railways in Asiatic Russia, about 9070 miles.

II. NAVIGABLE WATERWAYS—

Total length (rivers, lakes, canals), 55,200 miles.

Obi-Yenisei Canal, connecting Ket (tributary of Obi) with Kass (tributary of Yenisei), 106 miles; with associated rivers from right bank of Obi to left bank of Yenisei, 560 miles.

The following table gives some particulars of the vessels plying on the chief rivers:—

Rivers.	Steamers. No.	Steamers. Tonnage.	Sailing Vessels. No.	Sailing Vessels. Tonnage.
Amur	163	16,944 ...	198	63,537
Ob	132	8,553 ...	533	349,871
Yenisei	25	1,568 ...	191	26,396
Lena	15	640 ...	103	9,641
Amu-Daria ...	4	96 ...	8	677

THE INDIAN EMPIRE

Area and Population

Divisions.	Area in Sq. Miles.	Population. 1891.	Population. 1901.
BRITISH INDIA:			
Under Governors—			
Bombay (with Sind and Aden)	123,064	18,878,314	18,559,561
Madras	141,726	35,630,440	38,209,436
Under Lieutenant-Governors—			
Bengal	115,819	49,321,758	50,722,067
Eastern Bengal and Assam[1]	106,130	28,259,128	30,961,459
United Provinces of Agra and Oude	107,164	46,904,791	47,691,782
Punjab	97,209	19,009,343	20,330,339
Burma	236,738	7,722,053	10,490,624
Under Chief Commissioner—			
Central Provinces and Berar	100,345	13,062,604	11,991,670
Minor Charges—			
North-West Frontier Province	16,466	1,857,504	2,125,480
British Baluchistan	45,804	—	308,246
Ajmir-Merwara	2,711	542,358	476,912
Coorg	1,582	173,055	180,607
Andaman and Nicobar Islands	3,143	15,609	24,649
Total, British India	1,097,901	221,376,957	232,072,832
NATIVE STATES:			
Bombay States	65,761	8,082,107	6,908,648
Madras States	9,969	3,700,622	4,188,086
Bengal States	32,773	3,637,344	3,940,462
United Provinces States	5,079	792,491	802,097
Punjab States	36,532	4,263,280	4,424,398
Central Provinces States	31,188	1,712,562	1,631,140
Baluchistan Agency Tracts	86,511	—	502,500
Kashmir	80,900	2,543,952	2,905,578
Rajputana Agency	127,541	11,990,504	9,723,301
Central India Agency	78,772	10,318,812	8,628,781
Baroda	8,099	2,415,396	1,952,692
Haidarabad	82,698	11,537,040	11,141,142
Mysore	29,444	4,943,604	5,539,399
Total, Native States	675,267	65,937,714	62,288,224
Total, Indian Empire	1,773,168	287,314,671	294,361,056

There were two severe famines during the intercensal period 1891–1901, namely in 1896–1897 and 1899–1900. These were accompanied by bubonic plague, and affected chiefly Bombay, Rajputana, Central Provinces, Central India, United Provinces, Berar, and Haidarabad. The total population in 1911 was 315,132,537, of which 244,267,542 were in British India.

[1] Eastern Bengal and Assam was constituted a separate province in 1905. It included the eastern part of the former Bengal province and the former chief commissionership of Assam. In 1912 the chief commissionership of Assam was restored, and Bengal was divided so as to form the two provinces of (1) Bengal and (2) Behar, Chota Nagpur, and Orissa, the former under a governor and the latter under a lieutenant-governor.

NON-BRITISH INDIA

Divisions.	Area in Sq. Miles.	Population.
French India	196	276,000
Portuguese India	1,638	532,000
Nepal	54,000	4,000,000
Bhutan	16,800	250,000
Sikkim	2,818	60,000
Total	75,452	5,118,000

Sikkim became a British protectorate in 1889.

Principal Native States

States.	Area in Sq. Miles.	Population 1901.	Reigning Family.
Bombay States—			
Cutch	7,616	488,022	Jareja Rajput (H).
Khairpur (in Sind)	6,050	199,313	Baluch (Talpur, M).
Nauanagar	3,791	336,779	Jareja Rajput (H).
Junagadh	3,284	394,887	M.
Palanpur	3,177	222,627	Lohani Afghan (M).
Bhaunagar	2,860	412,664	Gohel Rajput (H).
Kolhapur	2,855	910,011	Maratha (H).
Madras States—			
Travancore	6,730	2,952,157	H.
Cochin	1,362	812,025	H.
Pudukotta	1,100	380,440	H.
Bengal States—			
Sirguja	6,055	351,011	H.
Moharbhanj	4,243	610,383	H.
Hill Tipperah	4,086	173,325	H.
Keunjhar	3,096	285,758	H.
Gangpur	2,518	238,896	H.
Jashpur	1,963	132,114	H.
Dhenkanal	1,463	273,662	H.
Kuch Behar	1,307	566,974	Brahmo.
Boad	1,264	88,250	H.
United Provinces States—			
Garhwal	4,180	268,885	H.
Rampur	899	533,212	Rohilla (M).
Punjab States—			
Bahawalpur	15,000	720,877	Daudputra (M).
Patiala	5,412	1,596,692	Sidhu Jat (S).
Chamba	3,216	127,834	Rajput (H).
Jind	1,259	282,003	Sidhu Jat (S).
Mandi	1,200	174,045	Rajput (H).
Sirmur	1,198	135,687	Rajput (H).
Nabha	928	297,949	Sidhu Jat (S).
Faridkot	642	124,912	Barar Jat (S).
Kapurthala	630	314,351	Ahluwalia.
Central Provinces States—			
Bastar	13,062	306,501	H.
Kalahandi	3,745	350,529	Rajput (H).
Patna	2,399	277,748	Rajput (H).
Bamra	1,988	123,378	Rajput (H).
Raigarh	1,486	174,929	Gond.
Kanker	1,429	103,536	Rajput (H).
Khairagarh	931	137,554	Gond.
Nandgaon	871	126,356	Bairagi.
Kashmir	80,900	2,905,578	Dogra Rajput (H).
Rajputana States—			
Marwar (Jodhpur)	34,963	1,935,565	Rahtor Rajput (H).
Bikaner	23,311	584,627	Rahtor Rajput (H).
Jaisalmer	16,062	73,370	Bhati Rajput (H).
Jaipur	15,579	2,658,666	Kachhwaha Rajput (H).
Mewar (Udaipur)	12,753	1,030,212	Sesodia Rajput (H).
Kota	5,684	544,879	Hara Rajput (H).
Alwar	3,141	828,487	Naruka Rajput (H).
Bundi	2,220	171,227	Hara Rajput (H).
Bhartpur	1,982	626,665	Jat (H).
Sirohi	1,964	154,544	Chauhan Rajput (H).
Karauli	1,242	156,786	Jadan Rajput (H).
Dholpur	1,155	270,973	Jat (H).
Tonk	1,114	143,330	Afghan (M).
Jhalawar	810	90,175	Jhala Rajput (H).

States.	Area in Sq. Miles.	Population 1901.	Reigning Family.
Central India States—			
Gwalior	25,041 ...	2,933,001 ...	Maratha (H).
Rewa	12,676 ...	1,325,307 ...	Baghel Rajput (H).
Indore	8,075 ...	850,690 ...	Maratha (H).
Bhopal	6,900 ...	1,267,526 ...	Afghan (M).
Baroda	8,099 ...	1,952,692 ...	Maratha (H).
Haidarabad	82,698 ...	11,141,142 ...	M.
Mysore	29,444 ...	5,539,399 ...	H.
Sikkim	2,818 ...	59,014 ...	Buddhist.

H = Hindu. M = Mohammedan. S = Sikh.

Population according to Language

Languages.	Population.	Distribution.
INDO-EUROPEAN:	221,448,616	——
Bengali ...	44,624,048	Bengal (95%), Assam, Burma, &c.
Western Hindi	39,367,779	United Provs. (55%), Central India, Punjab, Rajputana, Central Provs., Haidarabad, Bombay, &c.
Behari	37,076,990	Bengal, United Provinces, &c.
Eastern Hindi ...	20,986,358	United Provs. (72%), Central Provs., Central India, &c.
Marathi ...	18,237,899	Bombay (56%), Haidarabad, Berar, Central Provs., &c.
Punjabi ...	17,070,961	Punjab (90%), Kashmir, &c.
Rajasthani ...	10,917,712	Rajputana (65%), Central India, &c.
Gujarati ...	9,928,501	Bombay (73%), Baroda, &c.
Oriya	9,687,429	Bengal (66%), Madras, Central Provs., &c.
Lahnda	3,337,917	Punjab (83%), N.-W. F. Prov., &c.
Sindhi	3,006,395	Bombay (Sind, practically all).
Western Pahari	1,710,029	Punjab (90%), Kashmir, &c.
Assamese ...	1,350,846	Assam (practically all).
Central Pahari ...	1,270,931	United Provinces (practically all).
Pushto	1,224,807	N.-W.F. Prov. (practically all).
Kashmiri ...	1,007,957	Kashmir (practically all).
English ...	252,388	Bengal, Bombay, Madras, United Provs., Punjab, Burma, Mysore, &c.
Baluch	152,188	Bombay (67%), Punjab, Baluchistan, &c.
Eastern Pahari	143,721	Bengal, Assam, Punjab, United Provs., &c.
DRAVIDO-MUNDA:	59,693,799	——
Telugu	20,696,872	Madras (68%), Haidarabad (25%), Mysore, Bombay, &c.
Tamil	16,525,500	Madras (97%), Mysore, &c.
Kanarese ...	10,365,047	Mysore (39%), Bombay (30%), Madras (15%), Haidarabad (15%), &c.
Malayalam ...	6,029,304	Madras (practically all).
Santali	1,790,521	Bengal (practically all).
Gond	1,125,479	Central Provs. (80%), &c.
Kol	948,687	Bengal (93%), Assam, Central Provs., &c.
Kurukh (Oraon)	591,886	Bengal (93%), Assam, Central Provs., &c.
Tulu	535,210	Madras (practically all).
Kandh (Kui) ...	494,099	Madras (75%), Bengal, Central Provs., Assam, &c.
Savara	157,136	Madras (all).
Kharia	101,986	Bengal, Central Provinces, Assam, &c.
INDO-CHINESE:	11,712,299	——
Burmese ...	7,474,896	Burma (practically all).
Karen	887,875	Burma (all).
Shan	753,262	Burma (practically all).
Manipuri ...	272,997	Assam (98%), &c.
Bodo	239,458	Assam (91%), Bengal, &c.
Garo	185,940	Assam (74%), Bengal, &c.
Chin	181,765	Burma (practically all).
Khassi	177,827	Assam (all).
Mon (Peguan) .	174,510	Burma (practically all).
Balti	130,678	Kashmir (all).
Tipura	111,974	Bengal, Assam.
OTHERS:		
Gipsy languages	344,143	Haidarabad, Berar, Mysore, Madras, Bombay, Central Provs., Central India, &c.

The total number of languages included in the Indian census returns is about 185.

Population according to Religion

Religious Group.	Pop. 1901.	Distribution.
Hindus ...	207,147,026	United Provs., Bengal, Madras, Bombay, E. Bengal and Assam, Central Provinces, Haidarabad, Rajputana, Punjab, Central India, Mysore, Baroda, &c.
Mohammedans	62,458,077	E. Bengal and Assam, Punjab, Bengal, United Provs., Bombay, Madras, Kashmir, N.-W. Frontier Prov., &c.
Buddhists ...	9,476,759	Burma (practically all).
Animistic ...	8,711,360	Bengal, Central Provinces, E. Bengal and Assam, Central India, &c.
Christians ...	2,923,241	Madras, Bengal, Bombay, Burma, &c.
Sikhs... ...	2,195,339	Punjab (practically all).
Jains	1,334,148	Bombay, Rajputana, &c.
Parsees ...	94,190	Bombay, &c.
Jews	18,228	Bombay, &c.

Principal Towns

Towns.	Population, 1901.
*†Calcutta (including Howrah; cap. Bengal and India)	1,184,581
*†Bombay (cap. Bombay)	776,006[1]
*†Madras (cap. Madras)	509,346
*Haidarabad (cap. Haidarabad)	448,466
*Lucknow (cap. Oude)	264,049[1]
*Rangoon (cap. Burma)	234,881
*Benares (United Provs.)	209,331[1]
*Delhi (Punjab)	208,575
*†Lahore (cap. Punjab)	202,964
*Cawnpore (United Provs.)	197,170
*Agra (United Provs.)	188,022
*Ahmadabad (Bombay)	185,889
*Mandalay (Burma)	183,816[1]
*†Allahabad (cap. United Provs.)	172,032[1]
*Amritsar (Punjab)	162,429
Jaipur (cap. Jaipur, Rajputana)	160,167
*Bangalore (Mysore)	159,046[1]
*Poona (Bombay)	153,320[1]
Patna (Bengal)	134,785[1]
*Bareli (United Provs.)	131,208
Nagpur (cap. Cent. Provs.)	127,734
Srinagar (cap. Kashmir)	122,618
Surat (Bombay)	119,306
*Meerut (United Provs.)	118,129[1]
*Karachi (Sind)	116,663
Madura (Madras)	105,984
*Trichinopoly (Madras)	104,721
*Baroda (cap. Baroda)	103,790[1]
*Peshawar (cap. N.-W.F. Prov.)	95,147
Dacca (cap. Eastern Bengal and Assam)	90,542
*Jabalpur (Cent. Provs.)	90,316
Laskar (or Gwalior; cap. Gwalior, Central India)	89,154[1]
*Rawal Pindi (Punjab)	87,688
*Multan (Punjab)	87,394
Indore (cap. Indore, Central India)	86,686
Mirzapur (United Provs.)	79,862[1]
*Rampur (cap. Rampur, United Provs.)	78,758
*Ambala (Punjab)	78,638
Bhopal (cap. Bhopal, Central India)	77,023
*Calicut (Madras)	76,981
*Shahjahanpur (United Provs.)	76,458[1]
Bhagalpur (Bengal)	75,760
Sholapur (Bombay)	75,288
Moradabad (United Provs.)	75,128
*Faizabad (Oude)	75,085[1]
Ajmir (cap. Ajmir)	73,839
Gaya (Bengal)	71,288[1]
Salem (Madras)	70,621
Koil (or Aligarh; United Provs.)	70,434
*Haidarabad (Sind)	69,378
Mysore (cap. Mysore)	68,111[1]
*Jalandhar (Punjab)	67,735
*Farakhabad (United Provs.)	67,338[1]
*Imphal (Eastern Bengal and Assam)	67,093
Saharanpur (United Provs.)	66,254
Darbhanga (Bengal)	66,244[1]
*Gorakhpur (United Provs.)	64,148
Jodhpur (cap. Jodhpur, Rajputana)	60,437[1]
Hubli (Bombay)	60,214
*Muttra (United Provs.)	60,042[1]
Combaconum (Madras)	59,673
Maulmain (Burma)	58,446
*Bellary (Madras)	58,247[1]
*Sialkot (Punjab)	57,956
*Trivandrum (cap. Travancore, Madras)	57,882
Tanjore (Madras)	57,870
Nagapatam (Madras)	57,190[1]
Alwar, (cap. Alwar, Rajputana)	56,771
*Bhaunagar (cap. native state, Kathiawar, Bombay)	56,442[1]
*Jhansi (United Provs.)	55,724
*Kolhapur (cap. Kolhapur, Bombay)	54,373
Nauanagar (cap. native state, Kathiawar, Bombay)	53,844
Patiala (cap. Patiala, Punjab)	53,545[1]
Coimbatore (Madras)	53,080
Bikaner (cap. Bikaner, Rajputana)	53,075
Cuddalore (Madras)	52,216
*Cuttack (Bengal)	51,364

* Including cantonment (or fort).
† Seat of an examining university.
[1] 1901 population less than that of 1891.

Climate

The following table gives the normal rainfall in inches for each of the twenty-four meteorological divisions, and also the rainfall in 1896, 1899, and 1901:—

Meteorological Divisions.	Area in Sq. Miles.	Rainfall in Inches. Normal.	1896.	1899.	1901.
Punjab Plains	120,000	21.96	13.35	8.93	18.08
United Provinces	83,500	39.03	23.69	35.43	33.81
Rajputana, East	67,000	23.29	24.13	11.9	12.47
Rajputana, West	58,000			1.32	
Central India	91,000	44.26	36.22	24.29	41.51
Behar	30,000	44.38	32.52	62.65	38.62
Western Bengal	38,000	52.75	45.59	50.71	48.54
Lower Bengal	54,000	65.09	52.86	76.63	64.88
Assam and Cachar	61,000	95.17	78.26	105.57	89.34
Orissa and Northern Circars	27,000	52.59	38.36	42.18	46.33
Central Provs., South	61,000	53.18	56.77	26.11	53.38
Berar and Khandesh	43,000	36.41	31.97	14.79	34.47
Gujarat	54,500	33.62	36.67	7.33	16.03
Sind and Cutch	68,000	9.43	8.74	.77	2.9
North Deccan	48,000	30.81	30.51	18.79	30.53
Konkan and Ghats	16,000	135.29	160.41	71.96	134.41
Malabar and Ghats	18,000	114.51	134.92	89.98	119.76
Haidarabad	74,000	34.51	23.36	16.53	31.06
Mysore and Bellary	58,000	29.27	25.78	21.57	28.42
Karnatic	72,000	36.88	38.23	31	39
Arakan	11,000	145.85	137.21	180.49	150.62
Pegu	32,500	78.14	75.94	74.52	78.79
Tenasserim	10,500	173.31	199.78	162.29	175.17
Upper Burma	——	37.7	33.31	44.93	37.21

The following table gives for each of twenty-eight stations in India and Ceylon the mean annual temperature, the maximum (July) temperature, and the annual range of temperature:—

Stations.	Latitude (N.).	Mean Annual Temp. (° F.).	Max. Annual Temp. (° F.).	Annual Range of Temp. (Deg. F.).
Peshawar (1165)	34° 2′	70.5	89.6	40
Lahore	31° 34′	75	92.1	39.8
Simla (7084)	31° 6′	55	66.9	25.9
Delhi (715)	28° 39′	73.8	91	36
Agra (551)	27° 10′	78.1	94.8	37.3
Darjiling (6885)	27° 3′	54	63	22
Lucknow (403)	26° 55′	75.7	90.5	30.4
Ajmir (1632)	26° 27′	79.5	94.3	32.6
Patna	25° 37′	77.5	97.9	37.1
Allahabad (298)	25° 28′	77.5	91.8	31.7
Dacca (35)	23° 43′	78.4	85	19.4
Jabalpur (1351)	23° 10′	76.3	91.2	30.4
Calcutta (20)	22° 34′	77.7	85	20
Chittagong (90)	22° 21′	75.9	82.9	19.3
Baroda	22° 17′	80.4	94.6	25.4
Nagpur (1025)	21° 9′	79.2	93.9	27.2
Ahmadnagar (2140)	19° 5′	78.1	87.4	17.3
Bombay (36)	18° 55′	79.5	84.7	11.7
Vizagapatam (31)	17° 42′	82.8	88	12.8
Rangoon (39)	16° 47′	79.9	84.6	10.1
Bellary (1976)	15° 9′	80.2	87.4	13.9
Madras (23)	13° 4′	81.9	87.3	11.7
Bangalore (3130)	12° 58′	74.1	80.6	11.5
Mangalore	12° 52′	81	86.2	8.3
Pondicherry	11° 56′	84.6	87.1	7
Utakamand (7228)	11° 24′	55.9	60.8	9.4
Cochin	9° 58′	80.4	84.7	7.6
Colombo (40)	6° 56′	80.1	82	4.1

The figures in brackets after the names of the stations denote the heights, in feet, above sea-level.

Principal Mountain Ranges

Ranges.	Chief Summits with Heights (in feet), or Greatest Elevation.
Himalaya, comprising—	
(1) Himalaya Proper	Everest (29,002), Kunchinjinga (28,176), Makalu (27,800), Dhaulagiri (26,826), Nanga Parbat (26,620), Nanda Devi (25,661), Chumalarhi (23,933).
(2) Karakoram (Mustagh) Mts.	Godwin-Austen (28,265), Gusharbrum (26,483), Masharbrum (25,676).
(3) Siwalik Hills	3500.
Hindu Kush	Tirachmir (25,350).
Suliman Mountains	Takht-i-Suliman (11,295)
Hala Mountains	7000.
Salt Range	Sakeswar (4994).
Aravalli Hills	Abu (5653).
Vindhya Mountains	4500.
Satpura Mountains	Dhupgarh (4454).
Mahadeo Mountains	4500.
Western Ghats	Samsa Parvat (6360).
Eastern Ghats	3000.
Nilgiri Hills	Dodabetta (8760).
Anamalai Hills	Anamudi (8850).
Palni Hills	7000.
Cardamom Hills	4000.
Arakan Yoma	Blue Mountain (7100).

Principal Rivers

Rivers.	Length in Miles.	Area of Basin in Sq. Miles.
A. Flowing into Bay of Bengal—		
Ganges	1500	395,000
Jumna (R)	860	118,000
Gumti (L)	500	—
Gogra (L)	570	—
Son (R)	460	21,300
Gandak (L)	—	—
Kusi (L)	325	—
Brahmaputra (San-po, Dihong)	1800	360,000
Dhamra (Brahmani and Baitarani)	410	—
Mahanadi	520	53,000
Godaveri	900	127,000
Pranhita (L)	—	—
Kistna (Krishna)	800	97,000
Bhima (L)	400	—
Tungabhadra (R)	400	—
North Penner (Pinakini)	355	20,000
South Penner (Pinakini)	245	6,000
Cauvery (Coleroon)	450	35,000
Irawadi	1000	160,000
Salwin	1600	—

Rivers.	Length in Miles.	Area of Basin in Sq. Miles.
B. Flowing into Arabian Sea—		
Indus	1950	372,500
Shayok (R)	—	—
Kabul (R)	—	—
Kuram (R)	—	—
Gumal (R)	—	—
Panjnad (L): Sutlej	600	—
Bias (R)	290	—
Chenab	590	—
Jhelam (R)	450	—
Ravi (L)	365	—
Luni	300	25,000
Mahi	350	16,000
Nerbudda	800	40,000
Tapti	400	26,000

R = right bank. L = left bank.

When two river names are arranged thus:—
Ganges
Jumna
the second river is a tributary of the first.

Population according to Occupation and Means of Livelihood

The following diagrams represent (1) the proportion of the population engaged in, and directly dependent upon, agriculture; (2) the proportions of the population engaged in, and directly dependent upon, the other principal industries and occupations. The scale of the second diagram is three times that of the first.

(1)

Agriculture 191,691,731 persons (65·16 %)	All other Occupations (34·84 %)

(2)

Earthwork & General Labour 17,953,261 (6·1 %)	Provision of Food, Drink etc. 16,758,726 (5·7 %)	Provision of Textiles & Dress 11,214,158 (3·8 %)	Personal, Household, & Sanitary Services 10,727,900 (3·64 %)	Learned & Artistic (1·68 %)	Commerce (1·49 %)	Provision & Care of Animals (1·35 %)	Administration (1·3 %)	Provision of Wood Cane, etc. (1·3 %)	Metals & Precious Stones (1·26 %)	Transport & Storage (1·2 %)	Leather, Hides, Horns (1·1 %)	Independent (1·7 %)	All others (3·39 %)

Agriculture

The following diagram shows the distribution of the net area by professionial survey in a recent year (=total area less feudatory states and area for which there are no returns) under the heads of forest, waste, fallow, &c. The figures in the rectangular divisions are derived from village papers, and their sum accordingly differs somewhat from the survey total. Of the net crop area 27,634,536 acres were cropped more than once, making a total area cropped of 227,345,258 acres.

Net Area by Professional Survey, 550,316,716 acres.

Forest, 66,363,530 acres	Not available for Cultivation, 135,359,092 acres	Cultivable Waste, 107,525,236 acres	Fallow Land, 41,144,393 acres	Net Area Sown with Crops, 199,710,722 acres

The accompanying diagrams show (1) the distribution of the total cropped area among food-grains, oil-seeds, fibres, and other crops, and also the principal food-grains; (2) the relative importance of the crops other than food-grains, especially oil-seeds and fibres; and (3) the relative importance of certain other crops, for whose area the scales of (1) and (2) are too small.

(1) Total Area Cropped, 227,345,258 acres.

Rice 70,067,328 acres	Wheat, 18,606,958 ac.	Barley, 6,217,738 a.	Great Millet, (Jawar) 21,818,880 ac.	Spiked Millet, (Bajra) 13,227,447 acres	Ragi Millet 3,7[illegible]	Maize 6,198,063 a.	Gram (pulse) 9,[illegible] acres	All others, 27,354,480 ac.	Oil-seeds, 11,967,839 ac.	Fibres, 13,143,434 ac.	All other crops

Total Food-grains and Pulses Area, 176,999,595 acres.

(2) Total Area Cropped other than that under Food-grains 50,345,663 acres.

Linseed, 2,266,228 acres	Sesamum, 3,753,457 acres	Rape & Mustard 2,878,092 acres	Others	Cotton, 10;301,059 acres	Jute, 2,274,330 acres	Sugar, 2,596,592 acres	Drugs & Narcotics 2,229,520 acres	Fodder Crops, 2,944,148 acres	Orchards and Gardens, 3,257,171 acres	All other Crops

Oil-seeds 11,967,839 Fibres 13,143,434

(3)

Sugar, 2,596,592 acres	Condiments & Spices, 1,120,757 acres	Indigo, 792,179 acres: Other Dyes, 25,159 acres	Tobacco, 952,245 acres	Opium 607,418 acres	Tea, 495,539 acres	Coffee, etc.

Distribution of the Principal Crops and of the Forest Area

Crop	Distribution
Rice	**Bengal** (52% of the rice area), Burma, Madras, United Provs., Central Provs., Assam, &c.
Wheat	**United Provs.** (34%), **Punjab** (32%), Central Provs., Bombay (with Sind), Bengal, Berar, &c.—Central India.
Barley	United Provs. (66%), Bengal, Punjab, &c.
Jawar (great millet)	Bombay and Sind (34%), Madras (23%), **Berar**, United Provs., Central Provs., Burma, &c.
Bajra (spiked millet)	Bombay and Sind (48%), Madras, United Provs., Punjab, &c.
Ragi	Madras (50%), Bengal, Bombay, &c.
Maize	United Provs. (34%), Bengal (33%), Punjab, &c.
Gram	United Provs. (57%), Punjab, Bengal, Central Provs., Bombay, &c.
All Food-grains	Bengal (28%), United Provs. (21%), Madras, Bombay and Sind, Central Provs., Punjab, Burma, Berar, Assam, &c.
Linseed	Bengal (34%), **Central Provs.**, **United Provs.**, Bombay, &c.
Sesamum ...	**Burma** (22%), Madras (21%), Central Provs., Bengal, Bombay and Sind, United Provinces, &c.
Rape and Mustard	Bengal (66%), Punjab, **Assam**, Sind, &c.
All Oil-seeds	Bengal (30%), Madras, Bombay and Sind, Central Provs., Burma, &c.
Sugar	United Provs. (50%), Bengal, Punjab, &c.
Condiments and Spices ...	Madras, Bengal, Bombay, &c.
Cotton	Bombay and Sind (29%), Berar (23%), Madras, United Provinces, Central Provs., Punjab, &c.
Jute	Bengal (over 99%), Assam, N.-W.F. Prov.
All Fibres ...	Bombay and Sind (23%), Berar (20%), Bengal (19%), Madras, United Provs., Central Provs., Punjab, &c.
Indigo	Bengal (35%), Madras, United Provs., &c.
Opium	United Provs. (65%), Bengal, Punjab.
Tobacco ...	Bengal (57%), Madras, Bombay and Sind, United Provs., &c.
Tea	Assam (67%), Bengal, Madras, Punjab, Agra, Upper Burma.
Coffee	Coorg (55%), Madras (45%).
Other Drugs and Narcotics	Madras (almost all).
Fodder Crops ...	Punjab (52%), United Provs., Central Provs., Madras, &c.
Orchards and Gardens ...	Bengal (32%), Madras, Burma, United Provs., Assam, &c.
Forests	Madras (19%), Burma (17%), Central Provs., United Provs., Bombay and Sind, Bengal, Punjab, Berar, Assam, &c.

Black type denotes that a particular food-grain or oil-seed is much more important in the agriculture of the province so distinguished than any other grain or oil-seed respectively.

Irrigation

The following table shows the extent and methods of irrigation in British India in a recent year:—

Provinces.	Area Cropped. (in Acres).	Area Irrigated.			
		By Canals.	By Tanks.	By Wells.	Total.
Bengal	59,973,200	877,562	—	—	877,562
Agra ...	30,644,553	2,123,558	1,048,107	4,157,222	7,768,586
Oude	11,976,175	—	951,438	1,506,968	2,521,663
Punjab	24,390,434	4,941,376	30,791	3,746,785	8,851,293
N.-W.F. Province	2,197,795	564,442	1,003	82,156	670,304
Upper Burma	4,318,035	447,822	149,735	10,348	689,818
Lower Burma	7,375,813	6,032	1,093	1,282	52,482
Central Provs.	17,244,446	—	625,392	87,987	745,618
Assam	4,887,005	—	—	—	—
Ajmir-Merwara	325,594	—	16,659	41,974	58,699
Coorg	170,409	1,370	—	—	1,370
Madras	29,739,501	3,019,193	2,176,033	1,206,559	6,623,322
Bombay	23,402,522	124,959	90,509	465,572	773,146
Sind ...	3,659,957	2,723,153	1	19,496	2,936,791
Berar	7,033,179	—	28	48,542	48,806
Pargana Manpur[1]	6,640	—	321	—	321
Totals	227,345,258	14,829,467	5,091,110	11,374,891	32,619,781

[1] A British district in Central India.

Live Stock

There are no complete and perfectly reliable returns of the live stock in India. The following list indicates the distribution of the chief domestic animals:—

Cows, Bulls, and Bullocks—United Provs., Madras, Punjab, Central Provs., Bombay, Burma, Assam, Bengal, Berar, Central India, Rajputana, Mysore, &c.

Horses and Ponies—United Provs., Punjab, Haidarabad, Bombay, Central Provs., Madras, &c.

Sheep and Goats—Madras, Punjab, United Provs., Bombay, Haidarabad, Central India, &c.

Buffaloes—United Provs., Punjab, Madras, Bombay, Central Provs., Burma, &c.

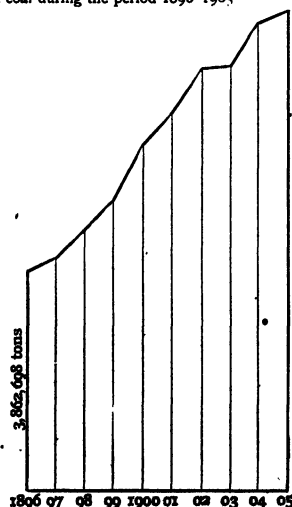
Camels—Punjab, Sind, &c.

Minerals

Minerals.	Annual Production.	Provinces.
Coal ...	8,418,000 tons	Bengal (85%), Haidarabad, Assam, Central India, Central Provs., Punjab, &c.
Salt ...	1,200,000 tons	Punjab, Rajputana, Madras, Bombay and Sind, Burma.
Iron Ore	60,000 tons	Madras (Salem), Central Provs. (Chanda), Bengal (Raniganj).
Gold ...	630,000 ozs.	Mysore (Kolar, 98%), Haidarabad.
Petroleum	145,000,000 gals.	Burma (98%), Assam, Punjab.
Manganese Ore	254,000 tons	Central Provinces, Madras Coast, Central India.
Mica ...	1000 tons	Bengal, Madras.
Tin ...	70 tons	Lower Burma.
Rubies	£90,000	Burma.
Jade ...	£50,000	Burma.
Saltpetre	—	Bengal, Madras, Punjab.
Copper Ore ...	—	—
Plumbago	—	Madras.
Corundum	—	Southern India.

The following graph shows the variation in the output of coal during the period 1896–1905.

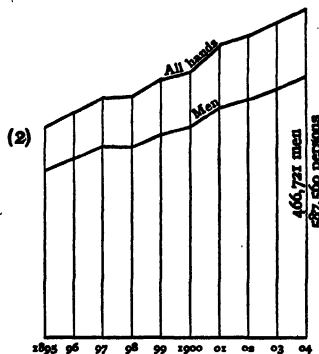
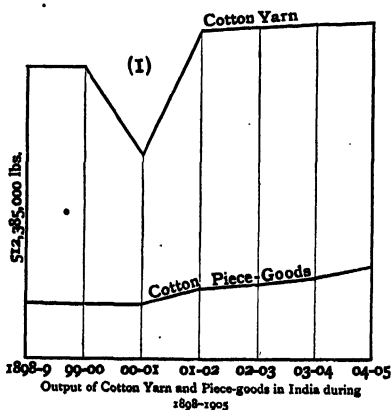
3,862,698 tons

1896 97 98 99 1900 01 02 03 04 05

Manufactures

A. Mills and Factories

Mills and Factories.	Number.	Persons Employed.	Further Information.
Cotton Mills	205	212,720	Capital, £13,000,000; 52,281 looms and 5,233,886 spindles; Bombay, Bengal, United Provs., Madras, Central Provs., Punjab.
Jute Mills	39	144,879	Capital, £5,800,000; 21,986 looms and 453,168 spindles; Bengal.
Woollen Mills	6	—	Capital, £300,000; 719 looms and 27,387 spindles.
Paper Mills	7	4,012	Capital, £360,000.
Breweries	27	—	—
Cotton-ginning, Cleaning, and Pressing Mills	951	85,559	—
Coffee Works	18	4,417	—
Flour Mills	42	3,016	—
Rice Mills	127	17,814	—
Oil Mills	112	5,200	—
Jute Presses	163	23,991	—
Lac Factories	128	7,831	—
Printing Presses	120	14,459	—
Indigo Factories	422	123,157	Declining rapidly.
Timber Mills	94	8,007	—
Sugar Factories	28	4,612	—
Silk Filatures	75	9,526	—
Iron and Brass Foundries	89	24,256	—
Tanneries	35	5,981	—

The following graphs represent (1) the variation in the output of cotton yarn and cotton-piece goods during 1898–1905; (2) the variation in the number of persons and in the number of men employed in all factories inspected under the Factory Act during 1895–1904:—

Output of Cotton Yarn and Piece-goods in India during 1898–1905

B. Indigenous Industries

The following are the most important of the old native industries of India:—

Cotton-weaving: Bombay (turbans and saris), Arni, Cuddapah, Madura, and Dacca (muslins), &c.
Silk-weaving: Murshidabad and elsewhere in Bengal, &c.; various kinds of silk-worms are reared in India.
Shawls and blankets: In various places.
Carpets: Madras (Ellore, Masulipatam), Punjab.
Wood-carving: Ebony articles in north, sandal-wood in south, teak in Burma and elsewhere.
Brass and copper work: Wide-spread.

Currency

A. Money of Account

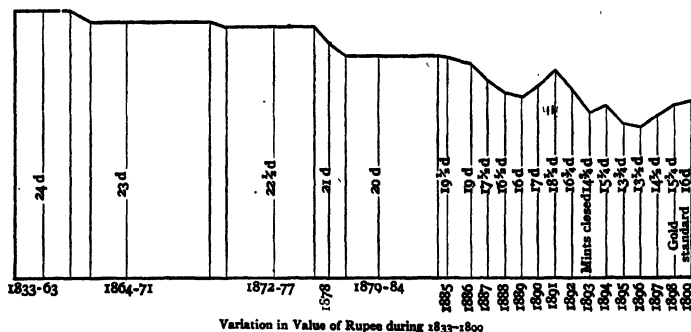
1 Rupee = 16 Annas.
1 Anna = 4 Pice.
1 Pice = 3 Pies.
A *lac* (or *lakh*) of rupees is 100,000.
A *crore* of rupees is 100 lacs.

B. Coins and Notes

Coins.	Fineness.	£	s.	d.
Gold—				
Mohur (Madras)	.916	1	9	2.4
2 Mohurs (Madras)	.916	2	18	4.8
⅔ Mohur (Madras)	.916	0	19	5.6
⅓ Mohur (Madras)	.916	0	9	8.8
Mohur (Bombay)	.92	1	9	1.46
Mohur (Calcutta)	.916	1	13	2.54
Silver—				
Rupee	.916	0	1	4
Half-rupee	.916	0	0	8
Quarter-rupee	.916	0	0	4
Eighth-rupee	.916	0	0	2
Anna	.916	0	0	1
Bronze or Copper—				
Half-Anna	—	0	0	0½
Pice	—	0	0	0¼
Pie	—	0	0	0$\frac{1}{12}$

(Sterling Value: £ s. d.)

The Coinage Act of 1906 provided for the coinage of a 1-anna piece in nickel. Bronze is to replace copper in the currency. Owing to the fluctuations in the value of the rupee the Indian mints were closed in 1893 to the free coinage of silver, and in 1899 British gold coins were made legal tender in India at the rate of 15 rupees to the sovereign. The following diagram shows the variation in the sterling value of the rupee since 1833:—

Variation in Value of Rupee during 1833–1899

Promissory notes for 5, 10, 20, 50, 100, 500, 1000, and 10,000 rupees are issued in each of eight currency circles. The notes are legal tender only within the circle of issue, and are payable at the place of issue and the capital city of the presidency containing the place of issue. In 1903 the *5-rupee note* was declared legal tender throughout British India (excluding Burma), and it may be cashed at any currency office. The *10-rupee note* is most in use. The capitals of the currency circles are Calcutta, Bombay, Madras, Allahabad, Lahore, Calicut, Karachi, and Rangoon.

The gross average circulation of notes in each currency circle during a recent year was as follows:—

Circle.	Circulation (in £ sterling).
Calcutta	10,878,000
Bombay	7,554,000
Madras	2,719,000
Lahore	1,920,000
Allahabad	1,314,000
Rangoon	1,036,000
Karachi	586,000
Calicut	128,000
Total	£26,135,000

The convertibility of the notes is secured by the following reserves in coin, bullion, and securities:—

Value of Note Circulation	£26,118,000
Reserve of Silver Coin	7,577,000
Reserve of Gold Coin and Bullion ...	10,741,000
Government Securities	6,667,000

The currency of *Portuguese India* is the same as that of British India, except that the anna is there called a *tanga*.

Weights and Measures

A. Linear Measure

The British India Measures of Length Act of 1889 made the imperial yard of three feet or thirty-six inches the standard of length throughout British India. Of the older native measures we need only mention the *gus* of two *hat'hs*, which was equal to a yard, more or less.

B. Surface Measure

An old native measure was the *beegah*, which was in some places equal to 1600 square yards, or about one-third of an acre. In other places it was nearly twice this size.

C. Cubic Measure

The Weights and Measures of Capacity Act of 1871 made the litre the unit of capacity under the old Indian name of *ser*.

D. Weight

The Weights and Measures of Capacity Act of 1871 made the kilogram the unit of weight under the old Indian name of *ser*. Of old native units of weight the most important are the *maund* of forty sers, equal (in Bengal) to 82⅞ lbs. avoirdupois, and the *tola*, equal to 180 grains.

In Portuguese India the old Portuguese weights and measures are in use side by side with those of British India. The unit of length is the *vara*, equal to about 1$\frac{1}{10}$ metre. The *covado* is about ⅔ of a vara. The *candy*, containing 20 maunds, is equal to 13.572 bushels.

Finance

A. Course of Finance

Financial Years.	Revenue. Gross. £	Revenue. Net. £	Financial Years.	Expenditure. Gross. £	Expenditure. Net. £
1894-95	63,458,285	36,299,124	1894-95	62,996,212	35,837,051
1895-96	65,580,111	38,551,687	1895-96	64,557,445	37,529,021
*1896-97	62,753,161	35,986,780	*1896-97	63,889,842	37,123,461
*1897-98	64,294,670	38,569,420	*1897-98	67,867,477	42,142,227
1898-99	67,617,795	41,383,262	1898-99	64,976,922	38,742,389
*1899-1900	68,637,164	41,332,418	*1899-1900	65,862,541	38,557,795
*1900-1901	75,272,291	43,076,529	*1900-1901	73,602,087	41,406,325
1901-1902	76,344,525	44,943,309	1901-1902	71,394,282	39,993,066
1902-1903	77,434,915	44,942,573	1902-1903	74,365,366	41,873,024
1903-1904	83,756,155	46,844,062	1903-1904	80,759,755	43,847,662
1904-1905	84,812,971	49,707,582	1904-1905	81,356,905	46,251,516
1905-1906	84,829,000	—	1905-1906	83,074,000	—
1906-1907	86,500,000	—	1906-1907	85,621,000	—

The gross revenue includes all receipts to the revenue account, and the gross expenditure includes all dis bursements chargeable against revenue. The net revenue includes all receipts under the various heads of revenue diminished by refunds, assignments, and other payments which appear in gross expenditure; and the net expenditure includes all disbursements under the various heads of expenditure diminished by the revenues under these heads, together with the cost of collection of the revenue. The surplus or deficit will be the same whether calculated from gross or from net revenue and expenditure. This may be otherwise expressed by the equation: Gross Revenue + Net Expenditure = Net Revenue + Gross Expenditure.

Conversions into sterling values have been made throughout (even before 1899) at the rate of fifteen rupees to the pound sterling.

The asterisked years are famine years.

B. Revenue

The following table shows the details of the gross revenue for a recent financial year:—

Sources.	Amount (in £ sterling).
Direct Taxation:	
Land Revenue	19,764,133
Provincial Rates	2,261,333
Income Tax	1,343,200
Indirect Taxation:	
Salt Duty	4,400,000
Excise Duties on Spirits and Drugs	5,817,333
Customs Duties	4,464,200
Stamp Duties	3,970,667
Registration	354,667
Government Undertakings and Property:	
Forests	1,789,933
Opium Monopoly	4,831,067
Post-Office, Telegraphs, and Mint	2,867,133
Railways	26,154,600
Irrigation	3,250,000
Other Public Works	515,600
Other Sources:	
Tribute from Native States	609,133
Interest	853,000
Civil Departments (Payments by Officers towards Pensions, &c.)	1,533,933
Army Services	1,064,467
Miscellaneous	650,733
Total Revenue	£86,495,132

"The chief source of revenue in India has from ancient times been a share of the produce of the land. In spite of the gradual development of other sources of wealth, agriculture still holds, and must continue to hold, by far the most important place among the resources of the country. The whole fabric of Indian society is based on the land. The administration of the land revenue is therefore even more important from a social and political than it is from a financial point of view."

"The greater part of the opium revenue of the government of India is obtained from a state monopoly of the production of the drug in British India, which descended to the British from their predecessors, the native rulers of India."

"The Government of India have adopted the principle that intoxicating liquors and drugs should be highly taxed, that traffic in them should be carefully regulated, and that the shops at which they can be obtained should be as few as possible."

The salt duty has been several times reduced in recent years, and will probably be abolished altogether before long.

"The stamp duty is derived from two sources, litigation and commercial transactions."

The Indian import duties were repealed in 1882, and no fresh duties were levied until 1894, with the exception of the tax imposed on petroleum in 1888. The usual rate of duty is 5 per cent *ad valorem*, but some articles are admitted free and others at duties lower than normal.

The quotations are from the annual *Statement exhibiting the Moral and Material Progress and Condition of India.*

The following table shows the variations in the total net revenue and the net revenue under various heads during the period 1891–1892 to 1901–1902. The method of index numbers is adopted, the value for the year 1891–1892 being taken as 100 in each case.

Financial Years.	Land.	Provl. Rates.	Income Tax.	Salt.	Excise.	Customs.	Stamps.	Forests.	Opium.	Total.
1891–92	100	100	100	100	100	100	100	100	100	100
1892–93	103.9	105.8	102	101.1	102.3	93.1	104.2	107	103.8	98.6
1893–94	106.9	100.2	104.9	95.7	105.2	98.9	105.7	115.7	77.2	95.5
1894–95	106.2	101.1	109.6	101.3	107.8	229.2	108.4	109.3	92.8	97.1
1895–96	109.5	105.7	111.3	103.5	111.9	298.2	110.9	111.5	82.2	102.4
*1896–97	99.7	100.9	113.6	98.2	109.6	265.7	112	116.3	63.7	97.6
*1897–98	107.2	106.3	114.8	100.3	107.2	276.7	113.5	116.8	45.3	102
1898–99	115	111.9	116.7	106.6	112.3	286.1	112.5	124.9	54.4	109.9
*1899–1900	107.8	107	118.4	102.2	113.1	279.9	114.8	124.5	65.1	107.5
*1900–1901	109.8	109.8	120.3	104.7	115.6	299.6	117.6	130.6	80.9	111.1
1901–1902	114.9	117.4	124.7	104	119.6	340.2	121.3	116.5	79	115

If the population of British India in 1891 be called 100, the population in 1901 would be 104.7.

C. Expenditure

The following table shows the details of the gross expenditure for a recent financial year:—

Heads.	Amount (in £ sterling).
Refunds, compensations, &c.	1,402,933
Cost of collection of revenue	7,654,267
Debt charges...	1,278,800
Famine relief and insurance	1,000,000
Army services	19,846,733
Post-office, telegraphs, and mint	2,895,200
Railways	23,925,267
Irrigation	2,992,933
Other public works	6,864,133
Civil departments (salaries, &c.)	14,283,333
Miscellaneous civil charges (pensions, &c.)	4,323,467
Net provincial adjustment	—1,077,600
Total expenditure	85,389,466

The cost of the cultivation and manufacture of opium (about £1,700,000) is included in the cost of collection of revenue as given above. The net provincial adjustment appearing in the above table is the excess of the increase of provincial balances by unspent grants over provincial expenditure defrayed from provincial balances. The system of provincial finance is fully explained in the annual *Statement exhibiting the Moral and Material Progress and Condition of India.*

The interest on debt incurred for the construction of railways and irrigation works is charged against the revenue from these works, and is not included under Debt Charges in the expenditure tables. This heading includes interest on the ordinary debt, on savings-bank balances, &c.

The plan of making a regular annual provision for famine relief and insurance in the Indian accounts dates from the great famine of 1877–78. A sum of £1,000,000, provided by increased taxation and other means, was to be devoted annually to relief and to the reduction or avoidance of debt. The scheme was reconstituted in 1881, and it was decided that the grant of £1,000,000 should be entered in the Budget under the head of Famine Relief and Insurance, with subheads for (1) Relief, (2) Protective Works, and (3) Reduction of Debt. "The intention was that one-half of the grant should be annually allotted to the construction of railways and irrigation works which would serve as a protection against famine, but could not be regarded as 'productive' works in the sense of yielding remunerative interest on the capital. The balance of the grant, after payment of the cost of the year's famine relief and of the expenditure on protective works, was to be applied to the reduction of debt, or to the construction of productive works for which debt would otherwise have been incurred. The money was to be spent each year in such a way as to relieve actual famine, to act as a preventive of future famines, or to put the finances in a better position for raising the funds needed when famine should occur."

The following tables show the variations in the total net expenditure and the net expenditure under various heads during the period 1891–1892 to 1901–1902. As in the case of revenue, the value for the year 1891–1892 is taken as 100.

Financial Years.	Debt Charges.	Army.	Civil Salaries, &c.	Miscellaneous Civil Charges.	Famine Relief and Insurance.	Total.
1891–92	100	100	100	100	100	100
1892–93	90.4	101.2	103	—	88	100.9
1893–94	88.7	99.8	105.7	—	89	98.1
1894–95	95.5	99.5	106.6	—	48.1	96.7
1895–96	70.5	107.2	109.1	—	46.3	100.5
*1896–97	54.5	103.9	111.9	—	167.3	101.4
*1897–98	67.1	118.6	114.4	—	422.8	112.2
1898–99	54.6	105.9	114.5	—	93.6	103.8
*1899–1900	55.8	97.5	117.7	—	248.2	101.1
*1900–1901	61.9	98.2	119.3	—	491.5	107.6
1901–1902	48.2	99.9	121.3	120.1	104.7	102.9

The great decrease in the Debt Charges shown above is explained by the transfer of debt from the ordinary to the productive category under a special kind of sinking-fund plan and to conversions. The army expenditure during the last four years was exceptionally reduced owing to the absence of troops in China and South Africa.

D. Public Debt

The following table shows the value at March 31, 1892, and March 31, 1905, of the permanent funded debt and the temporary and unfunded debt of British India. The latter consists of savings-bank balances and provident funds, other deposits and obligations, and temporary loans. The permanent debt consists of ordinary (unproductive) and productive debt. The latter was incurred in connection with railways and irrigation works, and its annual charge appears on the expenditure side of the public accounts under railways and irrigation. The interest and charges on the ordinary debt appears under Debt Charges in the accounts. The Government of India uses its surplus to increase the productive debt (*i.e.* capital expenditure on railways and irrigation works) at the expense of the ordinary unproductive debt due to wars and famines in past years.

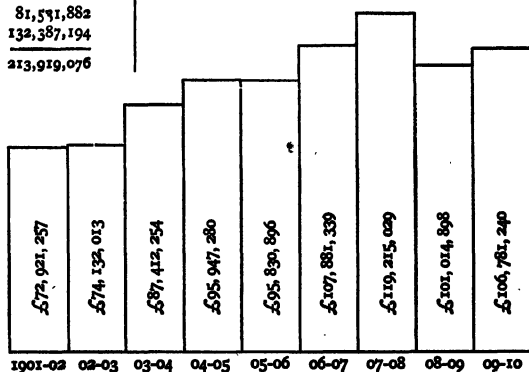
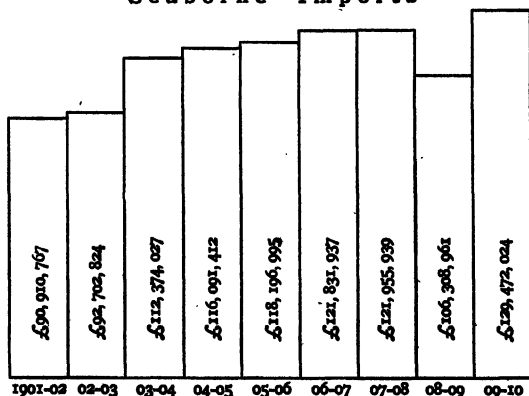
	March 31, 1892. £	March 31, 1905. £
Permanent (Funded) Debt—		
In India ...	68,461,545	81,531,882
In England ...	107,404,143	132,387,194
Total ...	175,865,688	213,919,076
Temporary and Unfunded Debt—		
In India ...	10,767,701	13,005,262
In England ...	—	—
Total ...	10,767,701	13,005,262
Total Debt—		
In India ...	79,229,246	94,537,144
In England ...	107,404,143	132,387,194
Total ...	186,633,389	226,924,338

About two-thirds of the Permanent Debt as given above belongs to the productive category.

E. National Wealth

Commerce

A. The Course of Trade

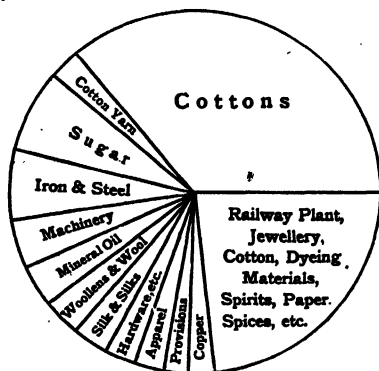
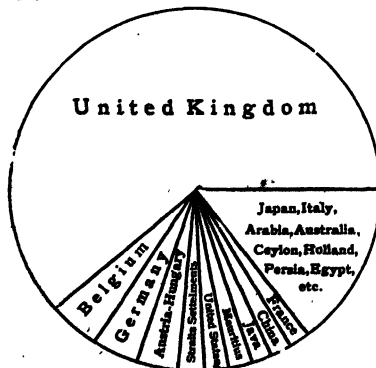
The accompanying diagrams show the sterling value of the seaborne imports and exports respectively for each of the years from 1901–1902 to 1909–1910 inclusive. Rupee values have been converted into sterling at the rate of 15 rupees to the sovereign. Both imports and exports comprise private merchandise, treasure, and government stores. The value of the merchandise imported in 1909–1910 was £78,038,365; and of the merchandise exported in the same year, £125,150,569.

Seaborne Imports

Seaborne Exports

The following table shows the total value of merchandise and treasure imported and exported across the land frontiers of India in 1894–1895, 1898–1899, 1902–1903, and 1905–1906:—

Years.	Value of Imports.	Value of Exports.
1894–95	... £4,928,000 ...	£4,251,000
1898–99	... 6,081,000 ...	5,230,000
1902–1903	... 4,580,000 ...	3,993,000
1905–1906	... 5,525,140 ...	4,373,755

This trade is carried on chiefly with Nepal, Kashmir, and the Shan States. Treasure is excluded from the figures for 1905–1906.

B. Imports

The following circle diagram shows graphically the relative values of the principal imports for a recent year:—

The following circle diagram shows the relative values in a recent year of the imports from the principal countries trading with India. It is to be noted that the trade of Ceylon, the Straits Settlements, and Egypt is largely transit.

The following diagram shows graphically the nature and relative importance of the principal imports from some of the chief countries of supply:—

Britain: Cotton Piece-goods | Machinery etc | Iron & Steel | Cotton Yarn | Railway Plant, Woollens, Hardware and Cutlery, Apparel etc.

Belgium: Iron & Steel | Dyes | Glass & Glassware | Cottons | Hardware and Cutlery, Copper etc.

Russia: Mineral Oil

Austria: Sugar | Glass & Glassware | Apparel | Metals | Cottons | Paper, Woollens, Hardware & Cutlery etc.

Straits Settlements: Betel-nuts | Fish etc. | Tin | Silk | Sugar | All other Articles

China: Raw Silk | Silks | Sugar | Tea | Drugs etc. | All other Articles

Germany: Sugar | Woollens | Metals | Hardware and Cutlery | Cottons | Salt | Liquors, Apparel, Glass & Glass ware etc.

Mauritius: Sugar

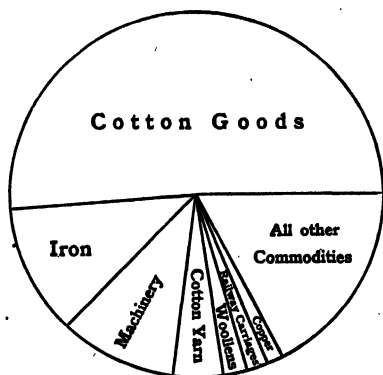
France: Apparel | Silk Goods | Liquors | Cottons | Clocks etc. | Dyes etc. | All other Articles

United States: Mineral Oil | Cottons | Tobacco | Iron & Steel | Machinery etc | All other Articles

Italy: Cottons | Silks | Dyes | Coral | All other Articles

Japan: Silks | Matches | Coal | All other Articles

The Nature of the Imports into India from the Principal Countries of Supply

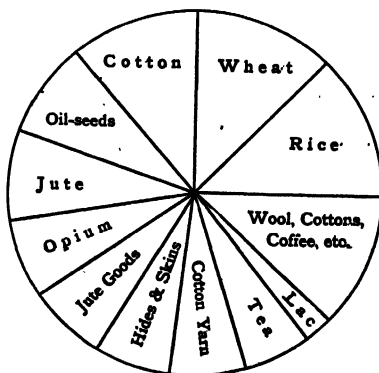
"The returns of quantities and values of imports and of exports are based on the bills of entry and shipping bills respectively; but the declarations contained in these documents are subject to scrutiny in all cases, and penalties may be inflicted where they are found to be false. The value is the wholesale value at the place of import or export, less trade discount, duty not being included in the value of dutiable goods. The returns show, not the prime origin of imports and ultimate destination of exports, but only the countries whence the goods were shipped to India and to which they are shipped from India, as disclosed by the shipping documents. No distinction is maintained between general, special, and transit trade; but goods of foreign origin, when re-exported, are shown in detail separately from those of Indian origin. Apart from the comparatively insignificant imports and exports by parcel post, of which only the total values are known, there are no special circumstances which affect the value of the statistical results."—From *The Statesman's Year-Book*

The accompanying circle diagram shows the principal commodities imported into India from the United Kingdom according to the Board of Trade Returns. The total value of the imports from Britain in 1906 was £45,181,307, exclusive of foreign and colonial merchandise re-exported from the United Kingdom (valued at £1,229,191), and of £5,031,566 of stores shipped for the Indian Government.

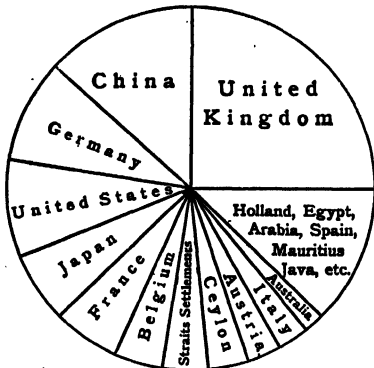
The "other commodities" of the diagram includes apparel, arms and ammunition, alcoholic liquors, chemicals, chinaware and earthenware, hardware, cutlery, electrical apparatus, glassware, haberdashery and millinery, implements and tools, leather, linens, drugs and medicines, brass, lead, zinc, painters' colours, paper, saddlery and harness, salt, silk goods, soap, sugar, tobacco, woodware, &c.

The following diagram shows the chief countries of origin of the leading imports, and the relative importance of the sources of supply in each case:—

Import	Sources of supply
Cotton Goods	United Kingdom; Austria, U.S.A., etc.
Cotton Yarns	United Kingdom (practically all)
Iron	United Kingdom; Belgium; Germany, Sweden etc.
Steel	Belgium; United Kingdom; Germany etc.
Copper	United Kingdom; Australia; Ceylon; Belgium; Japan etc.
Tin	Straits Settlements; Other countries
Lead	United Kingdom; Other countries
Machinery etc.	United Kingdom; Other countries
Hardware & Cutlery	United Kingdom; Germany; Austria; Belgium; Other countries
Railway Plant	United Kingdom; Other countries
Sugar	Austria-Hungary; Mauritius; Germany; Unit. King.; Java; China, etc.
Mineral Oil	Russia; United States; Others

C. Exports

The following circle diagram shows the relative values of the principal exports for a recent year:—

Indian imports consist mainly of manufactured goods, but the exports are mostly agricultural products, raw materials, and partly manufactured goods. If jute and jute manufactures be taken together as one export they head the list, even without taking into account the value of the millions of jute bags, &c., which annually leave the ports of India containing grain and other produce. The export of wheat varies greatly from year to year owing to the fluctuations in the yield of the crop caused by the uncertainty of the rainfall. A continuous wheat supply from India cannot be relied on, and this probably affects the export even in good years. The rice export is of much greater importance because of the greater steadiness both in demand and in supply.

The following circle diagram shows the relative values in a recent year of the exports to each of the principal countries trading with India. The trade of the Straits Settlements, Egypt, and Ceylon is largely transit.

The following diagram shows the nature and relative importance of the principal exports to the chief countries of destination:—

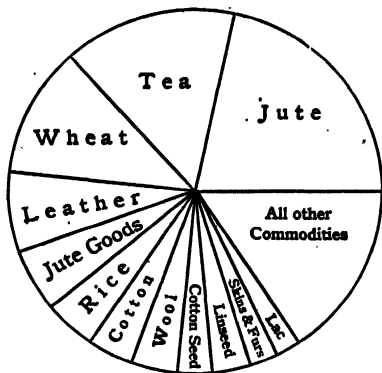
Country	Exports
Britain	Tea; Jute; Hides & Skins; Linseed; Wheat; Rice; Jute Goods; Wool, Coffee, Indigo, Teak, etc.
Germany	Jute; Cotton; Rape-seed; Linseed; Hides & Skins; Rice; Sesamum, Jute Goods, etc.
China	Cotton Twist & Yarn; Opium; Cotton; Jute Goods; Other Articles
France	Jute; Rape-seed; Sesamum; Linseed; Earth-nuts; Cotton; Coffee; Silk; Castor & other Seeds, Hides & Skins, Indigo, Manures etc.
United States	Hides & Skins; Jute Goods; Jute; Lac, Indigo, Nitre etc.
Straits Settlements	Rice; Opium; Jute Bags; Cottons; Cotton Yarn; Fodder, Provisions, Hides & Skins etc.
Egypt	Rice; Wheat; Seeds; Indigo; Jute Bags; Other Articles
Japan	Cotton; Indigo, Rice etc.
Belgium	Cotton; Rapeseed; Wheat; Sesamum; Linseed; Poppy Seed; Castor Seed, Hemp, etc.
Ceylon	Rice; Coal & Coke; Cottons; Provisions, Animals, Teak, Spices, Seeds etc.
Italy	Cotton; Hides & Skins; Jute; Linseed; Sesamum; All other Articles
Austria-Hungary	Cotton; Jute; Hides & Skins; Indigo; Seeds; Coffee etc.

The following diagram shows the chief countries of destination of the leading exports and the relative importance of the countries in each case:—

Export	Countries
Rice	Egypt; Ceylon; Straits Settlements; British East Africa; United Kingdom; Mauritius; Other countries
Linseed	United Kingdom; Germany; France; Belgium; Holland; Italy; Other countries
Rape-seed	Germany; France; Belgium; Italy, U.K. etc.
Sesamum	France; Belgium; Germany; Italy; Others
Cotton (raw)	Japan; Germany; Italy; Belgium; Austria-Hungary; China; France, U.K. etc.
Cotton Yarn	Hong-Kong; China; Other countries
Cotton Goods	Straits Settlements; Ceylon; Aden; East Africa, U.K., etc.
Jute (raw)	United Kingdom; Germany; France; United States; Other countries
Jute Goods	United States; Australia; United Kingdom; Hong-Kong; Straits Settlements; Argentina, Chili, Egypt, Germany etc.
Hides & Skins	United States; United Kingdom; Germany; Italy; Other countries
Opium	Hong-Kong; China; Straits Settlements; Other countries
Tea	United Kingdom; Australia; Others
Indigo	United Kingdom; Egypt; United States; Austria-Hungary; Japan; France; Germany; Turkey in Asia; Persia, Holland etc.

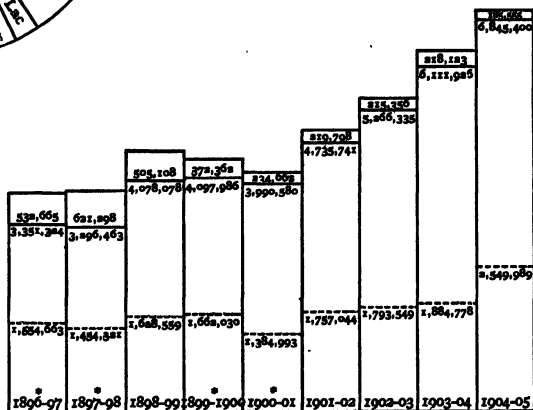
Principal Countries of Destination of the Chief Exports from India

The note under imports on p. 268 is also relevant here. It must be noted in particular that goods sent to the Straits Settlements, Egypt, and Ceylon are largely re-directed to other countries, and this is true to a less extent of goods sent elsewhere. For instance, the bulk of Indian tea is returned as exported to the United Kingdom, but there can be little doubt that a fair proportion of this is re-exported from the United Kingdom to various parts of the European continent and America.

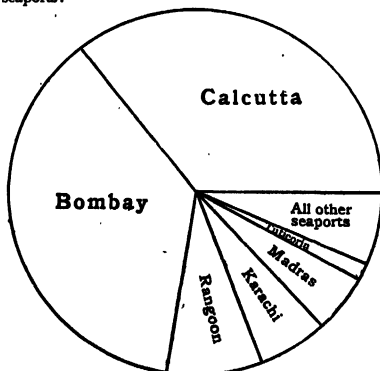
The exports of cotton yarn and cotton goods are of interest as an evidence of the growth of manufacturing industries in India. The cotton yarns exported are of low counts, and are taken mainly by China. The cotton goods find their market chiefly in Asiatic and African countries. The raw cotton exported goes at present mainly to Japan, but India may yet send larger supplies to Europe, where the need of a wider area of supply has been acutely felt in recent years.

The accompanying circle diagram shows the principal commodities imported into the United Kingdom from India according to the Board of Trade returns. The total value of the imports from India into Britain was £37,833,460 in 1906.

The "other commodities" of the diagram includes coffee, cordage, Peruvian bark, opium, indigo, myrobalans, cutch and gambier, dyewoods, hemp, hides, manganese ore, mica, oils, oilseed cake, piassava fibre, various oil seeds, silk, ginger, pepper, sugar, tobacco, wax, teak, other woods, mohair, carpets and rugs, &c.

Shipping

The accompanying diagram shows the tonnage of shipping entered in the foreign trade at all Indian ports in each year from 1896–1897 to 1904–1905. The full line across each rectangle separates steam tonnage (below) from sailing (above). The part of the rectangle below the broken line represents steam tonnage entered *via* the Suez Canal. In this, as in several previous diagrams and tables, famine years are indicated by an asterisk.

The following circle diagram represents the distribution of the tonnage entered in a recent year according to the nationality of the vessels:—

Ports

The following diagram shows the distribution of the trade in merchandise in a recent year among the chief seaports:—

Other seaports are: Porbandar, Gogo, Dholera, Cambay, Surat, Kalyan, Trombay, Panwel, Ratnagiri, Vijayadrug, Vengurla, Karwar, Honawar, Mangalore, Cannanore, Calicut, Beypur, Ponnani, Cochin, Alleppi, Quilon, on the coast of the Arabian Sea; Nagapatam, Porto Novo, Masulipatam, Koringa, Coconada, Bimlipatam, Kalingapatam, Gopalpur, Diamond Harbour, Port Canning, on the western side of the Bay of Bengal; Chittagong, Akyab, Bassein, Maulmain, on its eastern side; and Port Blair, in the Andaman Islands.

Principal River Ports

On the Ganges—

Cawnpore, Allahabad, Mirzapur, Benares, Patna, Sahibganj, Rampur Beauleah, Goalanda.

On the Jumna—

Delhi, Muttra, Agra, Etawah, Allahabad.

On the Brahmaputra—

Dibrugarh, Tezpur, Gauhati, Goalpara, Dhubri, Kaliganj, Sirajganj, Goalanda.

On the Indus and its Tributaries—

Sukkur, Haidarabad, on the main river; Firozpur, on the Sutlej; Multan, on the Chenab; Jhelam, on the Jhelam.

On the Irawadi—

Bhamo, Mandalay, Myingyan, Magwe, Prome.

Railways

Class.	Length in Miles.	
State Lines worked by the State ...	6,507	
State Lines worked by Companies ...	14,974	
Total State Lines		21,481
Guaranteed Companies' Lines	1,408	
Assisted Companies' Lines	1,864	
Total Private Lines ...		3,272
Lines owned by Native States, and worked by them or by State Railway Agency	1,398	
Lines owned by Native States, and worked by Companies	2,070	
Total Native State Lines ...		3,468
Portuguese Lines	51	
French Lines	23	
Total Foreign Lines ...		74
Grand Total		28,295

Chief Railway Lines

East Indian (*State*).—From Calcutta (Howrah) up Ganges Valley to Delhi; 1972 miles.

Eastern Bengal (*State*).—In Calcutta and neighbourhood; 1235 miles.

Oudh and Rohilkhand (*State*).—Connects Lucknow with Cawnpore, Benares, Aligarh, Moradabad, Bareli, Saharanpur, &c.; 1165 miles.

Lucknow-Bareilly (*State*); 237 miles.

South Indian (*State*).—From Madras to Tuticorin (branches to Tinnevelli, Nagapatam, Pondicherry, &c.); 1123 miles.

Great Indian Peninsula (*State*).—From Bombay N.E. to Jabalpur (branch to Nagpur), also S.E. to Raichur on Madras Railway; 1562 miles.

Madras (*Guaranteed*).—From Madras N.W. to Raichur, also W. to Calicut (branch to Bangalore); 904 miles.

Madras (*North-East; State*); 497 miles.

Bombay, Baroda, and Central India (*Guaranteed*).—From Bombay through Gujarat to Ahmadabad; 504 miles.

North-Western (*State*).—Connects Delhi with Peshawar, and Karachi with Lahore and Delhi; 3269 miles.

Southern Punjab; 502 miles.

Rajputana-Malwa (*State*).—Connects Ahmadabad with Delhi, Agra, Cawnpore, and Khwanda; 1782 miles.

Bengal-Nagpur (*State*).—Through Central Provinces to Nagpur on Great Indian Peninsula (branch to Balasor, &c.); 1690 miles.

Burma Railways (*State*).—Rangoon to Prome, also Rangoon to Mandalay and beyond 1340 miles.

Bengal and North-Western.—From Sonpur (E. Indian) to Naipalganj, with branches; 901 miles.

Southern Maratha (*State*).—From Dharwar to Bezwada (branches to Poona, Bijapur, and Harikar); also in Mysore; 1458 miles.

Rohilkhand and Kumaun Railway; 54 miles.

Indian Midland Railway (*State*).—From Bhopal *via* Jhansi and Gwalior to Agra; 808 miles.

Bhaunagar-Gondal-Porbandar (*State*).—In Kathiawar; 334 miles.

Morvi Railway (*State*).—In Kathiawar; 94 miles.

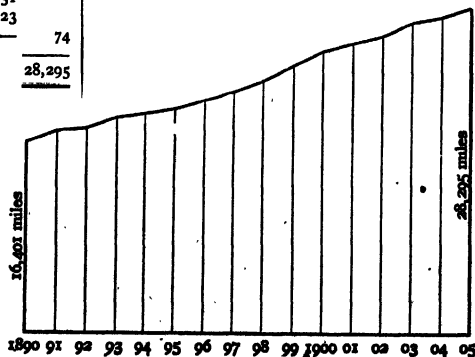
Bhopal-Itarsi (*State*).—In Central India; 44 miles.

Jodhpur-Bikaner Railway (*State*). — Rajputana; 709 miles.

Haidarabad-Godaveri Valley Railway (*State*); 391 miles.

Tapti Valley Railway; 155 miles.

Assam Bengal Railway (*State*).—Connects Chittagong, Badarpur, Silchar, Lumding, Gauhati, &c.; 740 miles.

The following graph shows the length of railway open in the Indian Empire in each year from 1890 to 1905:—

The Canals

Province.	Total Length of Canals used for Irrigation (including Distributaries). Miles.	Total Length of Canals used for Navigation. Miles.	Total Area Irrigated. Acres.
Bengal	3,407	1834	841,126
United Provs.	12,919	537	2,617,457
Punjab	11,589	432	4,652,774
Madras	10,558	1252	3,550,036
Bombay (with Sind)	4,827	—	1,943,864
Total	43,300	4055	13,605,257

Principal Canals

Bengal:
- Orissa (IN); 222,000 acres.
- Midnapore (IN); 86,000 acres.
- Sone (IN); 493,000 acres.
- Calcutta and Eastern (N).
- Nadia Rivers (N).
- Orissa Coast (N) and Hijili Tidal (N).

United Provinces:
- Eastern Jumna (I); 278,000 acres.
- Upper Ganges (IN); 820,000 acres.
- Lower Ganges (IN); 628,000 acres.
- Agra (IN); 186,000 acres.
- Betwa (I).

Punjab:
- Western Jumna (IN); 700,000 acres.
- Bari Doab (I); 956,000 acres.
- Sirhind (IN); 814,000 acres.
- Chenab (I); 1,946,000 acres.
- Jhelam (I); 306,000 acres.
- Sidhnai (I); 165,000 acres.
- Sutlej and Indus Inundation Canals (I); 396,000 acres.

Bombay: Nira and Mutha Canals (I); 61,552 acres.

Sind: All Inundation Canals.

Madras:
- Godaveri Delta System (IN); 879,000 acres.
- Kistna Delta System (IN); 649,000 acres.
- Cauvery Delta System (I); 990,000 acres.
- Penner River Canals (I); 130,000 acres.
- Periyar Canals (I); 154,000 acres.
- Rushikulya Canals (I); 84,300 acres.
- Kurnool (IN); 89,000 acres.
- Buckingham (N).

I = Irrigation; N = Navigation.

Post-Office and Telegraphs

The following table shows the business of the post-office for each year from 1895–1896 to 1904–1905:—

Year.	No. of Letters, Newspapers, Parcels, &c.	No. of Money Orders.
1895–96	413,870,240	10,342,355
1896–97	438,778,727	11,284,136
1897–98	465,019,125	12,019,473
1898–99	476,811,414	12,127,856
1899–1900	509,006,476	12,952,483
1900–1901	532,282,742	13,420,713
1901–1902	559,945,847	14,107,218
1902–1903	589,297,416	15,868,564
1903–1904	631,902,126	17,066,593
1904–1905	678,920,431	18,300,528

The following table shows the number of depositors and the amount of deposits in the Post-Office Savings Banks in each year from 1895–1896 to 1904–1905:—

Year.	No. of Depositors.	Balance of Deposits (including Interest). Rupees.
1895–96	684,823	99,423,490
1896–97	713,320	96,392,410
1897–98	730,387	92,872,980
1898–99	755,871	94,280,041
1899–1900	785,729	96,464,466
1900–1901	816,651	100,432,569
1901–1902	866,693	106,821,233
1902–1903	922,353	114,215,534
1903–1904	987,635	123,336,717
1904–1905	1,058,813	134,070,130
		(= £8,938,009).

The following table shows the extent and business of the government telegraphs in each year from 1895–1896 to 1904–1905:—

Year.	Length of Line. Miles.	Length of Wire. Miles.	No. of Paid Messages.
1895–96	46,375	142,926	4,736,734
1896–97	48,584	148,136	5,077,584
1897–98	50,305	154,824	5,713,227
1898–99	51,768	160,650	5,448,600
1899–1900	52,909	170,766	6,237,301
1900–1901	55,055	181,883	6,449,372
1901–1902	55,827	190,887	6,475,545
1902–1903	56,830	200,533	6,742,094
1903–1904	59,692	212,330	7,307,087
1904–1905	61,684	227,749	9,098,345

Administration

A. Administration in Britain

Secretary of State for India: a member of the Cabinet.
The Council of India: 12 members (paid) in seven committees.

B. The Government of India

Viceroy and Governor-General: appointed by Crown.
Executive Council: 6 ordinary members and the Commander-in-chief in India: a kind of Cabinet.
Legislative Council: Executive Council expanded by addition of not more than 60 members, partly nominated by the Governor-General and partly chosen by election.

C. Provincial Governments

(*a*) Madras and Bombay:
Governor: appointed by Crown.
Executive Council: not more than 4 ordinary members.
Legislative Council: Executive Council expanded by addition of not more than 50 members, partly nominated, partly elected.

(*b*) Bengal, Eastern Bengal and Assam, United Provinces, Punjab, and Burma:
Lieutenant-Governor: appointed by Governor-General in Council.
Executive Council: not more than 4 members.
Legislative Council: maximum number, 50 for Bengal, United Provinces, E. Bengal and Assam; 30 for others. Partly nominated, partly elected

(*c*) Central Provinces:
Chief Commissioner: appointed by Governor-General in Council.

(*d*) Minor Charges:
Chief Commissioner of Ajmir-Merwara and *Agent to Governor-General in Rajputana.*
Chief Commissioner of Coorg and *Resident in Mysore.*
Chief Commissioner in British Baluchistan and *Agent for Baluchistan.*
Chief Commissioner and Agent in North-West Frontier Province.
Chief Commissioner and Superintendent of Andaman and Nicobar Islands.

D. Local Administration

Districts, 249 in number, each under a *Collector-Magistrate* (Bengal, Agra, Madras, Bombay without Sind) or *Deputy-Commissioner* (elsewhere). Average area of a district, 4034 sq. miles; average population, 928,154.

In all provinces but Madras the districts are grouped in *Divisions*, each under a *Commissioner*.
Smaller divisions are the *tahsil*, *taluk*, and *thana*.

E. Municipal Government

The following table shows the number and population of municipalities in the various provinces of British India in a recent year:—

Administrations.	No. of Municipalities.	Total Population.
Bengal (excluding Calcutta)	161	2,874,533
Calcutta	1	847,796
United Provinces	89	3,111,583
Punjab	138	2,086,316
North-West Frontier Province	10	186,375
Burma (excluding Rangoon)	40	664,914
Rangoon	1	221,160
Central Provinces and Berar	58	883,579
Assam	14	94,982
Ajmir-Merwara	3	102,820
Coorg	5	15,249
Madras (excluding capital)	60	1,907,102
Madras City	1	509,346
Bombay (excluding capital)	163	2,367,418
Bombay City	1	776,006
British Baluchistan	1	13,517
Total	746	16,662,696

There are also 1087 *District and Local Boards*, especially in Madras, Bombay, and Bengal. The District Boards control the Local or Taluk Boards, and administer the greater part of the revenues and such branches of expenditure, including generally the educational charges, as are of more than purely local importance. In each province power of supervision and control has been reserved to the Government through the district officer. The local boards contain a proportion of elected members. Agricultural rates and taxes form the chief part of their income.

Defence

The Army

The following table gives the strength of the European and Native Armies in British India:—

Corps.	Numbers.	
European Army—		
Cavalry	5,652	
Artillery	14,663	
Engineers	580	
Infantry	53,746	
Total European		74,641
Native Army—		
Cavalry	24,994	
Artillery	7,338	
Sappers and Miners	5,061	
Infantry	117,854	
Total Native		155,247
Miscellaneous Officers		1,137
Imperial Service Troops		17,541
Native Reserves		27,755
Volunteers		30,378
Total		306,699

Education

The following table shows the number of male and female scholars in public and private institutions in British India in a recent year:—

	Males.	Females.
Public Institutions—		
Colleges	25,823	280
Schools	3,856,478	501,275
Private Institutions	593,598	58,786
Total	4,475,899	560,341
	5,036,240	

The total number of scholars learning—

English	was	510,297
A Classical Language	,,	676,249
A Vernacular Language	,,	4,632,213

The total number of scholars may be grouped also thus:—

Europeans and Eurasians	31,733
Native Christians	163,889
Hindus	3,330,710
Mohammedans	1,074,430
Others (mostly Buddhists)	436,684
Total	5,037,446

The total number of educational institutions was as follows:—

Public institutions under public management	25,508
,, ,, ,, private ,,	88,624
Private institutions	42,627
Total	156,759

The following table shows the number of illiterates in the population in 1901:—

	Total Population.	Illiterate Population.
Males	149,442,106	134,752,026
Females	143,972,800	142,976,459
Total	293,414,906	277,728,485
Not returned ...	946,150	—
Total population	294,361,056	—

CEYLON

Area and Population

Provinces.	Area in Sq. Miles.	Population, 1901.
Central	2,300	623,011
North Central	4,000	79,110
Northern	3,365	341,985
Southern	2,145	566,925
Eastern	4,035	174,288
Western	1,435	925,342
North-Western	3,000	353,845
Uva	3,155	192,072
Sabaragamuwa	1,900	321,755
Total	25,335	3,578,333

The above population includes about 5000 Boer prisoners of war. Excluding the military and shipping population and the Boer prisoners of war, the total in 1901 was 3,565,954. The corresponding figure for 1891 was 3,007,789. The estate population, consisting of coolies from Southern India, amounted to 441,601 in 1901. More than half of this number were in the Central Province, and the total increased greatly during the decade 1891-1901.

Population according to Race

Races.	Numbers in 1901.
Sinhalese (including Kandyans)	2,331,045
Tamils	953,535
"Moormen" (Mohammedans, chiefly of Arab origin)	228,706
Eurasians	23,539
Javanese, &c.	20,036
Malays	11,963
Europeans, Americans, &c.	9,509
Veddahs	1,000

Population according to Religion

Religions.	Numbers in 1901.
Buddhism	2,141,599
Hinduism	828,622
Mohammedanism	248,140
Christianity	359,972

About 78 per cent of the Christians are Roman Catholics.

Principal Towns

Towns.	Population, 1901.
Colombo (Western; capital)	158,228
Galle (Southern)	37,316
Jaffna (Northern)	33,879
Kandy (Central)	26,519
Negombo (Western)	19,000
Trincomali (Eastern)	12,000

11.8 per cent of the people live in towns.

Climate

The following table gives some particulars of temperature and rainfall for a number of stations:—

Stations.	Height above Sea-level (in Feet).	Mean Annual Temp. (° F.)	Annual Rainfall (in Inches).	Number of Rainy Days per Year.
*Jaffna (Northern)	9	81.7	44	74
*Trincomali (Eastern)	12	81.2	62.74	112
Anuradhapura (N. Central)	295	80.2	54.44	104
*Puttalam (N. Western)	27	79.5	46.08	77
Kurunegala (N. Western)	381	79.6	84.3	172
*Batticaloa (Eastern)	26	80.4	55.35	102
*Colombo (Western)	40	80.1	88.31	173
Nuwara Eliya (Central)	6188	57.9	94.14	202
Ratnapura (Sabaragamuwa)	84	79.1	150.13	207
*Galle (Southern)	48	79.7	91.33	206

The * denotes a coast station.

The island extends in north latitude from 5° 55′ to 9° 51′. The mean annual rainfall for the island as a whole is 87.83 inches, falling chiefly in the two periods April-June and Sept.-Nov. The annual range of temperature is about 10 degrees F. at Colombo, about 20.2 degrees at Galle, and nearly 18 degrees at Trincomalee.

Principal Mountain Summits

Peaks.	Height in Feet.
Pedrotallagalla	8260
Kirrigalpota	7810
Tolapellà	7720
Adam's Peak	7420

Principal Rivers

North Coast—
- Kanakarayan Aru.

East Coast—
- Mahaweli Ganga (150 miles.).
- Maruru Oya.
- Mundini Aru.
- Patipal Aru.
- Kumukkan Aru.

South Coast—
- Kataragam Ganga.
- Magama Ganga.
- Walawe Ganga.
- Nilwala Ganga.
- Gin Ganga.

West Coast—
- Bentota Ganga.
- Kalu Ganga.
- Kelani Ganga.
- Maha Oya.
- Deduru Oya.
- Mi Oya.
- Kala Oya.
- Arivi Aru.

Agriculture

Crops.	Area in Acres.
Rice	600,000
Other grains (maize, pulse, &c.)	120,000
Cocoa-nuts	924,000
Areca-nut, Palmyra, and Kitul palms	135,000
Cinnamon	32,500
Cardamoms	8,000
Other spices	10,000
Other palms and fruit-bearing trees and shrubs (bread-fruit, plantain, orange, &c.)	243,000
Garden vegetables, roots, yams, potatoes, cassava, &c.	100,000
Coffee	3,600
Tea	458,000
Cacao	40,000
Cinchona	1,170
Sugar-cane	13,000
Cotton	1,000
Tobacco	13,000
Citronella and other essential-oil grasses	40,000
Rhea, aloes, and other fibres	1,000
Rubber-trees	36,000
Eucalyptus and other introduced trees	8,000
Cultivated grass land	15,000
Natural pasturage, &c.	1,000,000

In a recent year the live stock were returned as follows:—3549 horses, 1,489,882 cattle, 95,547 sheep, 148,288 goats, and 98,080 pigs.

Minerals, Manufactures, and Fisheries

I. Minerals—

Plumbago, chiefly in the North-Western, Central, and Western Provinces; gems, especially in Sabaragamuwa; mica, iron ore, and gold are also found in some places.

II. Manufactures—

Jewellery and precious stones; cotton cloth; jaggery; cocoa-nut, gingelly, and citronella oils; coir and copra; bricks and tiles; mats; baskets; tobacco; carpentry; soda-water and beer; engineering; salt (government monopoly).

III. Fisheries—

Chiefly in Northern, Eastern, and North-Western Provinces. The oyster-pearl fishery on the northern coasts is very irregular.

Currency

A. Money of Account

1 Rupee = 100 Cents.

B. Coins and Notes

Coins.	Fineness.	£	s.	d.
Silver—				
Rupee	.916	0	1	4
Half-rupee	.916	0	0	8
Quarter-rupee	.916	0	0	4
*50 Cents	.8	0	0	8
*25 Cents	.8	0	0	4
10 Cents	.8	0	0	1.6
Bronze—				
5 Cents	—	0	0	0.8
1 Cent	—	0	0	0.16
½ Cent	—	0	0	0.08
¼ Cent	—	0	0	0.04

(Sterling Value.)

The rupee is of the same weight and fineness as that of British India. The British sovereign is legal tender to any amount, as in India.

The silver coins smaller than the rupee are legal tender up to five rupees, and the bronze coins up to half a rupee. The coins marked * are Indian coins.

Promissory Notes are issued by a government department (values: 1000, 100, 50, 10, and 5 rupees).

The above currency system was introduced in 1892.

The following table shows how the paper currency was secured in a recent year:—

	Rs.
Value of Currency Notes in Circulation	13,868,440
Gold Reserve (Rs. 15 = 1 sovereign)	6,174,990
Silver Reserve	1,742,310
Investments in Indian Government Paper	3,383,654
Other Investments	2,567,486

Weights and Measures

A. Linear Measure

As in Britain.

B. Surface Measure

As in Britain.

C. Cubic Measure

A *seer* is equal to about 1.06 litre or 1.864 pint.

A *parah* is nearly equal to 5.6 gallons, and 8 parahs make an *amomam* of nearly 44¾ gallons.

The following measures of capacity are used for liquids:—

1 Legger = 75 Welts.
1 Welt = 2 Gallons (old wine gallon).
1 Gallon = 4 Quarts.

The *gallon* of this table is .833111 of the imperial gallon. The *legger* is almost equal to 125 imperial gallons.

D. Weight

British weights are used for foreign goods. The native *candy* (or bahar) is equal to 500 lbs. avoirdupois. The *garce* is about 4.132366 tons.

Finance

A. Course of Finance

The following table shows the revenue and expenditure of Ceylon during the period 1901–1906:—

Years.	Revenue. £	Expenditure. From Current Revenue. £	Expenditure. Total. £
1901	... 1,762,473	... 1,726,440	... 1,947,783
1902	... 1,813,204	... 1,756,125	... 1,869,474
1903	... 1,961,554	... 1,780,988	... 1,805,250
1904	... 2,056,446	... 2,134,626	... 2,285,280
1905	... 2,293,022	... 1,982,460	... 2,139,166
1906	... 2,335,377	... 2,176,281	... 2,299,637

The excess of total expenditure over expenditure from current revenue represents expenditure on railway and harbour construction, water-works, and irrigation works out of surplus funds. Sometimes part of this special expenditure is met out of ordinary revenue.

B. Revenue

The following table shows the details of the revenue for a recent year:—

Sources.	Amount (in £ sterling).
Customs	557,236
Port, Harbour, Wharf, and Lighthouse Dues	139,119
Licenses, Excise, and other Internal Revenue	506,801
Court and Office Fees, Payment for Specific Services, and Reimbursements in Aid ...	94,737
Posts and Telegraphs	82,520
Government Railways	672,862
Interest	38,716
Miscellaneous Receipts	29,334
Land Revenue	39,620
Land Sales	174,432
Total Revenue	£2,335,377

C. Expenditure

The following table shows the details of expenditure for a recent year:—

Heads.	Amount (in £ sterling).
Debt Charges	243,249
Central Administration (Governor, Civil Service, Secretariat, Audit Office, Treasury)...	94,636
Provincial Administration	68,070
Pensions	94,171
Survey Department	55,013
Customs Department	10,677
Port and Marine Department...	29,475
Legal Departments	72,116
Police	66,203
Prisons	36,033
Medical Department	134,564
Ecclesiastical...	620
Education	71,420
Exchange	9,551
Army...	191,232
Forests	18,435
Post Office and Telegraphs...	97,011
Railway Department	404,427
Public Works Department	37,592
Irrigation Department	24,030
Public Works Annually Recurrent ...	155,040
Public Works Extraordinary	127,570
Miscellaneous	135,146
Total	2,176,281
Expenditure from Loan Funds:	
Harbour Construction	62,984
Railway Construction	9,222
Irrigation Construction	13,078
Other	38,072
Grand Total Expenditure ...	£2,299,637

D. Public Debt

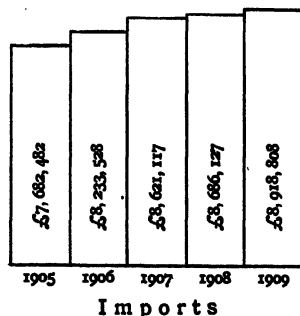
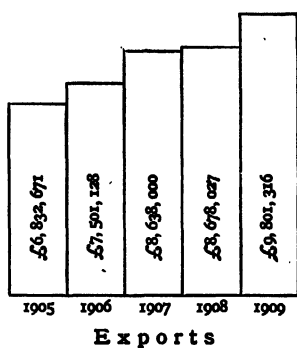
The public debt of Ceylon, which has been incurred entirely for public works, stood as follows at a recent date:—

Loans raised in London (unpaid balance) ...	£4,638,334
Local silver debt (unpaid balance) 3,144,078 Rs., equal to	209,605
Total Debt	£4,847,939

Provision for repayment is made by means of a Sinking Fund.

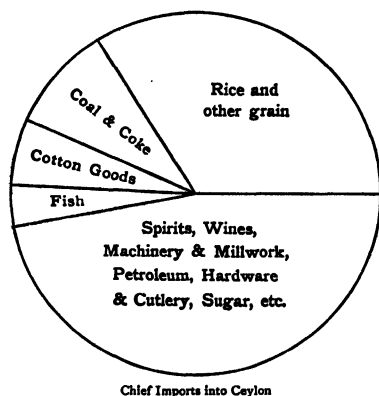
Commerce

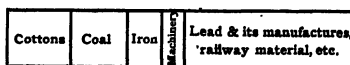
A. The Course of Trade

The following diagrams show the movement of imports and exports during 1905–1909. Specie and coal exported for the use of steamers are omitted.

Imports

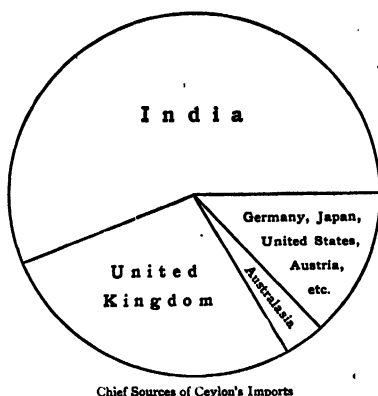
B. Imports

The following circle diagram shows the principal imports in a recent year:—

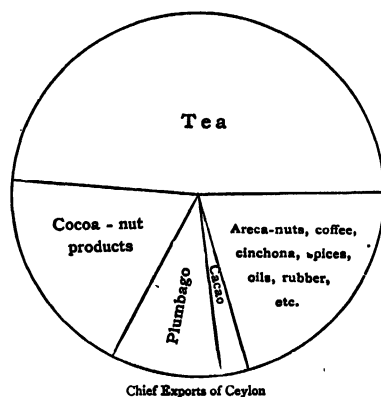
Chief Imports into Ceylon

The following diagram shows the relative value of the principal imports from the United Kingdom according to the Board of Trade returns:—

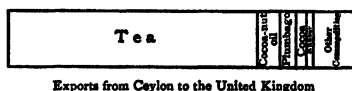
Imports into Ceylon from the United Kingdom

The value of the exports of the United Kingdom to Ceylon in 1906 was £1,570,174, not including foreign and colonial merchandise to the value of £91,918. The total of all exports from the United Kingdom to Ceylon was therefore £1,662,092.

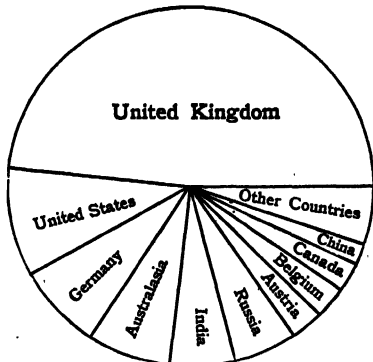
The following circle diagram shows the distribution of Ceylon's imports among the chief countries of supply:—

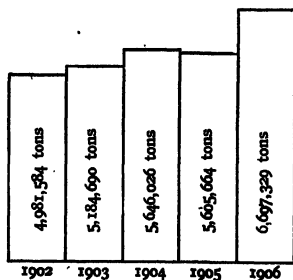
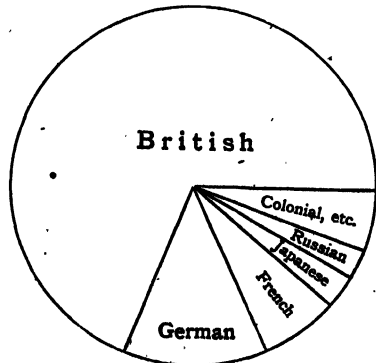
Chief Sources of Ceylon's Imports

C. Exports

The following circle diagram shows the principal commodities exported in a recent year:—

Chief Exports of Ceylon

The following diagram shows the relative value of the principal exports to the United Kingdom according to Board of Trade returns:—

Exports from Ceylon to the United Kingdom

The imports of the United Kingdom from Ceylon were valued at £4,441,184 in 1906.

The following circle diagram shows the chief countries which receive Ceylon's exports:—

Shipping

The following diagram shows the tonnage entered at the ports of Ceylon in each year from 1902 to 1906 inclusive:—

The following circle diagram shows the shares of the principal flags in the tonnage entered:—

Ports

The principal seaports are Colombo and Galle. The tonnage entered at Colombo in a recent year was 5,179,045, of which 5,129,235 represented steam vessels. This was exclusive of vessels calling for coaling and for orders only.

Railways

In Operation or under Construction:—

Haputale—Nanoya (branch to Nuwara Eliya)—Peradeniya—Kandy—Matale.

Kurunegala — Anuradhapura — Jaffna — ultimately across to India.

Peradeniya (on the Central line) — Polgahawela (branch to Kurunegala) — Colombo — Galle — Matara.

Colombo—Avisawella; up the Kelani valley.

Total length, about 570 miles.

Post-Office and Telegraphs

The income of the post-office (including telegraphs) is over £80,000 per annum. There are about 390 offices open for postal and telegraph business. The number of letters, post-cards, newspapers, parcels, &c., dealt with in a recent year was about 27,000,000. The number of telegrams sent is over 700,000 per annum. The length of telegraph wire is about 3400 miles, and of telephone wire, 490 miles.

Education

The following table gives some particulars of the schools, and the scholars under instruction, in a recent year:—

Kinds of Schools.	Number.	No. of Scholars.
Government Schools	554 ...	70,715
Aided ,, ...	1,582 ...	156,040
Unaided ,, ...	1,752 ...	36,478
Total	3,888 ...	263,233